The Relationship Between Identity Development and Family History Knowledge

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Identity Development and its Relationship to Family History Knowledge
Among Late Adolescent University Students

Clive Gordon Haydon

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Master of Science

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ABSTRACT

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The primary purpose of this study was to examine the relationship between identity development in late adolescent university students and family history knowledge. The relationship was examined within both the individual developmental and family systems theoretical frameworks. It was proposed that identity development involves achieving personal autonomy from the family of origin and at the same time maintaining positive relatedness to the family of origin. Identity development was examined using exploration, commitment, autonomy, and relatedness as dependent variables. It was proposed that late adolescent’s personal exploration of and commitment to roles and values may be influenced by knowledge of parent and grandparent histories. It was also proposed that late adolescent’s achievement of personal autonomy and positive family relatedness may be influenced by knowledge of parent and grandparent histories. The sample consisted of 239 university students. The Parental Relationship Inventory (PRI) and the Ego Identity Process Questionnaire (EIPQ) measured identity development constructs. The Do You Know? (DYK) scale measured family history knowledge. Multiple regression analyses indicated a significant positive relationship between commitment and family history knowledge and relatedness and family history knowledge, a negative relationship between autonomy and family history knowledge, and a weak correlation between exploration and family history knowledge. Findings indicate family history knowledge may influence components of identity development. This has practical implications for parents and others such as teachers, youth workers, social workers, and youth program designers whose work is directed at enhancing adolescent development.

Keywords: adolescence, family history knowledge, identity.
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Abstract

The primary purpose of this study was to examine the relationship between identity development in late adolescent university students and family history knowledge. The relationship was examined within both the individual developmental and family systems theoretical frameworks. It was proposed that identity development involves achieving personal autonomy from the family of origin and at the same time maintaining positive relatedness to the family of origin. Identity development was examined using exploration, commitment, autonomy, and relatedness as dependent variables. It was proposed that late adolescents’ personal exploration of and commitment to roles and values may be influenced by knowledge of parent and grandparent histories. It was also proposed that late adolescents’ achievement of personal autonomy and positive family relatedness may be influenced by knowledge of parent and grandparent histories. The sample consisted of 239 university students. The Parental Relationship Inventory (PRI) and the Ego Identity Process Questionnaire (EIPQ) measured identity development constructs. The Do You Know? (DYK) scale measured family history knowledge. Multiple regression analyses indicated a significant positive relationship between commitment and family history knowledge and relatedness and family history knowledge, a negative relationship between autonomy and family history knowledge, and a weak correlation between exploration and family history knowledge. Findings indicate family history knowledge may influence components of identity development. This has practical implications for parents and others such as teachers, youth workers, social workers, and youth program designers whose work is directed at enhancing adolescent development.

Key words: adolescence, family history knowledge, identity.
Identity Development and its Relationship to Family History Knowledge

Among Late Adolescent University Students

Identity development is an essential component in the transition from adolescence to adulthood (Adams, 1998; Adams, Berzonsky, & Keating, 2006; Erikson, 1985; Kleiber 1999; Li, 2005; Marcia, 2002; Schachter, 2005). Failure to establish a positive identity – a perceived sense of personal wholeness and continuity over time (Adams et al., 2006) – may lead to maladaptations and malignancies, as well as endanger future psychosocial development (Adams; Boeree, 1997; Li; Schwartz, 2006). As such, late adolescence is a particularly important time in the identity development process. (Adams; Adams et al.; Erikson, 1959, 1968 & 1985; Marcia; Phoenix, 2001). It is during this phase of psycho-social development that individuals experience, to varying degrees, a crisis brought on by the need to reconcile personal and social conflicts. These conflicts lead to a search for resolution and personal meaning. During this reconciliation process individuals obtain perspective about sense of self and who one is (Adams), or in other words, they develop an identity. Central to the crisis resolution process is achieving the balance between the need to be a unique individual, contrasted with the need to achieve a sense of belonging and relatedness to those who are significant to the adolescent. This can be summed as the balance between independent individual identity and dependent social identity (Adams; Kleiber).

Individual developmental and family systems are two perspectives researchers have used to explain the adolescent identity development process (Adams, 1998; Grotevant, & Cooper, 1985; Mathies & Adams, 2004; Perosa, Perosa, & Tam, 2002; Sabatelli & Mazor, 1985). These frameworks provide both psychological and sociological views of identity development.
Although some argue these two perspectives are not compatible (Slife & Williams, 1995), others contend that despite being theoretically and methodologically distinguishable they share common theoretical roots and can be integrated (Davies & Cicchetti, 2004; Perosa et al.; Sabatelli and Mazor). In general, these models emphasize the need for individuals to explore and make commitments to roles and ideals while negotiating the balance between autonomy and relatedness within family, peer, and other social relationships (Adams; Adams et al., 2006; Erikson, 1959 & 1968; Mathies & Adams; Marcia, 2002; McElhaney, Porter, Thompson & Allen, 2008; Perosa et al.). For the most part, scholars have sought to understand the individual’s struggle to psychologically separate from the family of origin and seek autonomy (Kivel, 1998; Perosa et al.). The separation process has been labeled individuation (Anderson & Sabetelli, 1990; Josselson, 1980; Collins & Laursen, 2004; Marcia, 1980; Marcia, 1993; Sabetelli & Mazor). Scholars of intergenerational relationships, however, have sought to understand the identity development process from a family systems perspective (Frank, Pirsch, & Wright, 1990; Grotevant & Cooper; Mathies & Adams; McElhaney et al.; Perosa & Perosa, 1993; Perosa, Perosa, & Tam, 1996 & 2002; Ryan & Lynch, 1989; Steinberg, 1990). They have considered the importance of adolescents remaining connected with their parents as they seek to disengage from them.

Within the family system, knowledge of family history, acquired by exploring the lives of parents and grandparents, may contribute to identity development (Fivush, Bohanek, & Duke, 2008; National Heritage Foundation, 2002 & 2006; Rancie, 2005). Several researchers have suggested knowing family history stories and participating in family history related rituals provides opportunities for examining roles and ideals (Gagalis-Hoffman, 2004; Hammond, 2001;
Pratt & Fiese, 2004). In addition, family history knowledge has been associated with increased family relatedness (Gagalis-Hoffman; Hammond; Pratt & Fiese). Between 2002 and 2005, the National Heritage Foundation (NHF), a family history charity based in Australia, conducted four applied ancestry programs. These programs incorporated reviewing and reflecting on family history stories as a main component. Program observers noted adolescent participants consistently referred to personal and family identity during exit interviews (National Heritage Foundation). However, no formal research was conducted to determine if family history knowledge contributed to positive identity development. Hence, the purpose of this study was to explore the relationship between identity development and family history knowledge, with a particular emphasis on late adolescent university students.

**Review of Literature**

Erikson’s eight-stage psychosocial model of human development is a widely recognized theory of identity (Adams, 1998; Erikson, 1968; Hammond, 2001; Li, 2005; Marcia, 1993; Phoenix, 2001; Schwartz, 2006). According to Erikson (1959, 1968, 1985), the life-cycle is divided up into eight key stages. During each stage there is a psychosocial crisis; a consequence of contradictory personal characteristics. Identity-Identity Diffusion is the fifth stage, taking place during the critical transition from adolescence to adulthood (Erikson; Marcia, 1980; Marcia, 1993; Marcia, 2002; Hammond). In this model, positive identity development is seen as a major component in the healthy psychological development of late adolescence (Erikson; Li).

Positive identity development involves gaining a strong sense of self (Fivush et al., 2008; Marcia, 2002). The process is one in which individuals must explore roles and values and make independent decisions and commitments regarding occupation; religious, political, and social
beliefs; and interpersonal and sexual values (Marcia). Utilizing these dimensions of exploration and commitment Marcia (1980, 2002) outlines four statuses of identity: (a) identity achievement; (b) foreclosure; (c) moratorium; and (d) identity diffusion. Each status represents a level of exploration and commitment. Identity achievement is reached after one has undertaken a process of exploration, has made decisions, and is now pursuing self-directed occupational and ideological goals. Foreclosure is a state in which one has committed to a set of values and beliefs and is pursuing an identified occupation, but there has been no individual exploration and this commitment has been based on parental views and values. Moratorium describes a state of active exploration where no commitment has yet been made. This is a time when adolescents can work toward developing their own set of guiding values and beliefs. Finally, identity diffusion is a state where individuals have made no commitments and are not seeking to explore the available alternatives (Li, 2005; Marcia, 1980, 2002; Schwartz, 2006).

Connected with determining one’s own ideological and occupational identity is the need to psychologically separate self from parents and family and the ability to see oneself as a separate and distinct individual (Adams, 1998; Anderson & Sabetelli, 1990). This process of psychological separation has been labeled individuation (Adams; Josselson, 1980; Marcia, 1980; Marcia, 1993; Perosa et al., 2002; Sabetelli & Mazor, 1985). From a psychoanalytical perspective, the individuation process is completed when fusion with others ceases to exist, and autonomy from the family of origin has been achieved (Anderson & Sabetelli; Perosa et al.). Fusion is defined as a state of embeddedness where there are no clear boundaries in relationships with others and emotional dependence on others is high (Perosa et al.; Sabetelli & Mazor).
Obtaining a sense of self, however, is dialectic and also requires the attainment of a sense of belonging. This is acquired through relatedness with and acceptance and recognition from family and peers (Adams, 1998; Grotevant, & Cooper, 1985; Kleiber 1999; Mathies & Adams, 2004; Muss, 1996; Perosa et al., 2002). Adolescents “are sometimes morbidly, often curiously, preoccupied with what they appear to be in the eyes of others as compared with what they feel they are” (Erikson, 1968, p.128). Thus, the peer group in particular has a strong influence on personal role, ideological, and relationship choices (Erikson, 1959; Hartup, 1983; Muss).

According to Moore & Boldero (1991), the peer group provides feedback about how individuals are seen by others. This feedback contributes to self-discovery and self-concept through reciprocity. The peer group also provides models to copy, and an empathetic support base while adolescents are establishing autonomy from parents. They further assist in the development of intimacy through compromise and the sharing of confidences.

Although a strong influence on individual identity development, the peer group does not completely remove the influence of the family (Hartup, 1983; Lerner & Steinberg, 2004; Mathies & Adams, 2004; McElhaney et al., 2008; Perosa et al., 2002; Wood, Mitchell, & Brand, 2004). In fact, it is argued that “secure family relations are the basis for entry into the peer system and success within it” (Hartup, p.172). In this regard, family system theorists have argued the developmental approach has not sufficiently emphasized the role of the family in the process of individuation and autonomy achievement. (Anderson & Sabetelli, 1990; Grotevant, & Cooper, 1985; Mathies & Adams; Sabetelli & Mazor, 1985).
Family Systems Framework

In seeking to explain the individuation process, family system theorists emphasize the influence of family relationships on individual development and healthy autonomy achievement (Anderson & Sabetelli, 1990; Grotevant, & Cooper, 1985; Mathies & Adams, 2004; Perosa et al., 2002). Family systems theory states that families can be likened to a system (Broderick, 1993). Families, like systems, must be looked at as a whole. The individual actions of one member of the system affect all other individuals, and vice versa (Broderick; White & Klein, 2008). As such, the family system impacts on identity development. Family system theorists argue individual development and autonomy achievement occur within healthy functioning family systems characterized by age appropriate levels of autonomy and relatedness. In such families individual autonomy is encouraged within the context of warm and supportive relationships (Anderson & Sabetelli; Mathies & Adams; McElhaney et al., 2008; Perosa et al.; Stutman & Lich, 1984). Stutman and Lich define this condition as Healthy Differentiation.

Differentiation describes the degree to which an individual has developed autonomy from the family of origin, and the degree to which the family system allows for such autonomy to be developed while maintaining close and supportive relations (Anderson & Sabetelli, 1990; Mathies & Adams, 2004; McElhaney et al., 2008; Perosa et al., 2002; Stutman & Lich, 1984). According to Stutman and Lich Healthy Differentiation is indicated by a combination of high autonomy and high relatedness (see Figure1). Stutman and Lich also identify three maladaptive forms of differentiation: Overinvolvement – Consonant type, Overinvolvement – Dissonant type, and Underinvolvement. Overinvolvement – Consonant type describes individuals who are overly involved with their family of origin and who are unable to achieve autonomy. They are unable to
make independent decisions or commit to personally selected roles and values. In addition, these individuals are comfortable with their dependent state. Overinvolvement – Dissonant type also describes individuals who are overinvolved with their family of origin and who are unable to achieve autonomy. In this case, however, these individuals are aware of their regressive and childlike tendencies, leading to feelings of resentment. Underinvolvement describes individuals who have a high degree of emotional and physical separateness from their family of origin. This form of differentiation is characterized by a significant lack of connection, intimacy, or commitment to the family of origin. The condition is described as a false autonomy, as the appropriate balance between independence from and relatedness to family has not been achieved. According to the family systems model optimal identity development occurs when healthy differentiation exists (Frank, Pirsch, & Wright, 1990; Grotevant & Cooper, 1985; Mathies & Adams; McElhaney et al.; Perosa & Perosa, 1993; Perosa et al.; Ryan & Lynch, 1989; Steinberg, 1990; Stutman & Lich).

To summarize, identity development is a critical component of the maturing process. Successful identity development requires an individual to establish both psychological autonomy and familial intimacy. This is achieved through a process of personal role and values exploration while maintaining intimate ties with parents and the family of origin. These two facets of identity development are braided and integrated together. The ideal state is neither independence nor dependence; healthy differentiation is a condition of interdependence. Thus, personal exploration, making decisions and commitments, developing autonomy, and maintaining a healthy relationship with one’s family all contribute to the identity development process.
Family History and Identity

One factor that may contribute to identity development through its influence on both psychological autonomy and strengthening family relatedness is family history knowledge (Fivush, Bohanek, & Duke, 2008; Gagalis-Hoffman, 2004; Hammond, 2001; Hawkins & Doxey, 2001; McGoldrick, 1995; Pratt & Fiese, 2004; Rancie, 2005). The individual developmental perspective suggests the need for personal exploration of, and commitment to, roles and ideological values. Limited research suggests such personal exploration and commitment may be facilitated through knowing and reflecting on family history stories. Gagalis-Hoffman reported that “kinship with story characters appeared to increase desire in both parents and their…children to emulate the traits and characteristics ascribed to their ancestors in family stories” (p.41). Hammond highlighted the use of family history knowledge as a facilitator of values transmission and reflection. His results suggested exploring the family’s historical traditions and values was important in building the next generation’s identity. Similarly, Pratt and Fiese argue that adolescents “are seen as drawing on the cultural reservoir of [family] stories to provide elements from which the…sense of self is constructed” (p.17). The family history stories become a medium through which individuals construct a sense of self through exploring roles and values. For example, a young high school dropout attending an applied ancestry program discovered a deceased uncle was a marketing professional and the creator of a famous advertising slogan. Previously without a vision of what occupational role to pursue, this youth now had a new sense of who he could be. He subsequently returned home and reenrolled in school with the intent to pursue tertiary studies in marketing. In another example, a young man who was reintroduced to stories about his grandfather’s experiences as a soldier in World War II,
chose to pursue a career in the armed forces. These examples illustrate how family history stories can facilitate occupational role exploration.

In addition, however, the literature suggests family history knowledge also contributes to the development of family relatedness through the family system (Fivush et al., 2008; Gagalis-Hoffman, 2004; Hawkins & Doxey, 2001; McGoldrick, 1995; Pratt & Fiese, 2004). Family stories link or connect generations, creating a sense of connectedness, belonging, and relatedness contributing to positive family relationships (Fivush et al.; Gagalis-Hoffman; Hawkins & Doxey; Homer, 2006; McGoldrick; Pratt & Fiese). For example, Gagalis-Hoffman found that parents and children who knew family history stories felt they “belonged to a group, which in turn gave them a feeling of…family identity” (p. 24). McGoldrick suggests that families “communicate their connectedness through rituals [including family stories] and patterns passed from generation to generation” (p.100). Similarly, Fivush et al. claim that “family stories are the way in which we connect across generations to create family history and family identity. Through the telling and sharing of family history stories children develop a sense of self as connected to previous generations” (p.5). Further, stories of parent’s and grandparent’s lives, and other stories from previous generations, “create meaning beyond the individual, to include a sense of self through historical time and in relation to family members” (Fivush et al., p.134). Thus, family history stories contribute to increased relatedness between members of the family system.

Evidence suggests that family history knowledge may have a positive influence on identity development. In addition, the literature suggests that in considering the influences of family history knowledge on identity development the need for both sense of self and relatedness should be considered (Fivush, Bohanek, & Duke, 2008; Gagalis-Hoffman, 2004; Hammond,
2001; Hawkins & Doxey, 2001; McGoldrick, 1995; Pratt & Fiese, 2004; Rancie, 2005). That is, consideration should be given to the process of exploration, commitment, and autonomy as well as to relatedness. Further, findings of Fivush et al. indicating family history knowledge contributed to preadolescents’ sense of self provoked interest in whether results could be replicated for late adolescent university students. Therefore, the purpose of this study was to explore the relationship between identity development variables of exploration, commitment, autonomy, and relatedness and family history knowledge, with a particular emphasis on late adolescent university students.

Methods

Study Design

Data were collected from late adolescent university students. The convenience sample (n = 239) consisted of 186 (77.8%) females and 53 (22.2%) males aged between 18 and 20 years old, drawn from seven United States universities: Western Kentucky (31.6%); Michigan State (28.3%); Clemson (16.9%); Brigham Young (13.1%); Indiana (5.5%); Texas A&M (4.2%); and, Western Washington (0.4%). Each participant completed two identity questionnaires and a family history knowledge questionnaire. The majority of participants were religious (73.4%) and had parents who were married (77.2%). In addition, the overwhelming majority grew up with their biological family (97.5%). An appropriate sample size was determined by a power analysis.

Data collection was via an online questionnaire. Instructions and a link to the questionnaire were e-mailed to professors at each selected university, who invited students to participate in the study. An informed consent letter was included as part of the online questionnaire and participants were not able to start the survey until they completed the consent
form. The first two hundred participants received an electronic gift voucher after completing the survey.

**Measures**

**Parental Relationship Inventory (PRI).** The PRI (Lich, 1985; Stutman, 1984; Stutman & Lich, 1984) was used to measure the identity development components of autonomy and relatedness. The PRI consists of 25 items (14 autonomy items and 11 relatedness items). A sample item on the Autonomy scale reads, “Many times when something happens to my parents, I feel like it’s happening to me.” A sample item on the Relatedness scale reads, “It is fun to be with my parents.” Items are answered on a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Autonomy and relatedness scores are summed separately providing individual total scores. Subjects can also be divided into high and low groups utilizing a median split, allowing for categorization into family differentiation categories (Stutman & Lich). The Cronbach’s alpha coefficients were reported as .79 for autonomy and .95 for relatedness (Stutman & Lich). For this sample, Cronbach’s alpha coefficients were .79 for autonomy and .87 for relatedness.

**Ego Identity Process Questionnaire (EIPQ).** The EIPQ (Balistreri, Busch-Rossnagel, & Geisinger, 1995) was used to measure identity development components of commitment and exploration. The EIPQ is a 32-item questionnaire designed to assess exploration and commitment (16 exploration items and 16 commitment items) within four ideological domains (politics, religion, occupation, and values) and within four interpersonal domains (friendships, dating, sex roles, and family). A sample item on the Exploration scale reads, “I have consistently re-examined many different values in order to find the ones which are best for me.” A sample
item on the Commitment scale reads, “I have firmly held views concerning my role in my family.” Each item is answered on a six-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Item scores are summed separately providing individual total scores for both exploration and commitment. The Cronbach’s alpha value for the overall exploration scale has been reported as .76, and the test–retest reliability coefficient for this scale as 0.90. Cronbach’s alpha value for the commitment scale has been reported as 0.75 with a test–retest reliability coefficient of 0.76 (Balistreri et al., 1995). For this sample, Cronbach’s alpha coefficients were .69 for exploration and .78 for commitment.

**Do You Know (DYK).** The DYK scale was used to measure family history knowledge (Duke, Lazarus, & Fivush, 2008). The DYK is a 20-item yes or no questionnaire designed to measure family history knowledge. A sample item on the DYK scale reads, “Do you know some of the lessons that your parents learned from good or bad experiences?” The scale tests respondent’s knowledge of major events, places lived, occupations, and family anecdotes from the lives of parent’s and grandparent’s. Each item on the questionnaire is worth 1 point, and the higher the score the higher the knowledge of family history (Duke et al.). For this sample, the Cronbach’s alpha coefficient was .78.

**Analysis**

Descriptive statistics (SPSS 17.0) were performed. Pearson Product Moment zero order correlations were calculated to check for multicollinearity and significant bivariate relationships among variables. With the use of a \( p < .01 \) criterion Mahalanobis distance was used to examine normality, skewness, linearity, and homoscedasticity of residuals. Hypotheses were tested using multiple regression analysis with identity measures (autonomy, relatedness, exploration, and,
commitment) as separate dependent variables and family history knowledge and socio-demographic variables as independent variables. In addition, analysis of variance was also conducted to compare family history knowledge means with Stutman and Lich’s (1984) family differentiation categories. A Tukey’s Post Hoc test was performed to examine the relationship between and within the family differentiation categories.

**Results**

With the use of a $p < .01$ criterion for Mahalanobis distance, four outliers among the cases were identified. Due to having multiple variables lying outside the normal distribution, two of these were eliminated to reduce skewness, and improve the normality, linearity, and homoscedasticity of residuals. As the remaining outliers lay just outside the specified parameters and their inclusion was deemed significant to the overall analysis of the data, they were included. No cases had missing data and no suppressor variables were found.

The mean scores for the identity constructs were autonomy 33.29 ($SD = 5.27$; Range = 21-50), relatedness 35.89 ($SD = 5.38$; Range = 14-44), commitment 65.01 ($SD = 9.98$; Range = 33-88), and exploration 64.91 ($SD = 8.70$; Range = 41-90). The family history knowledge mean was 16.22 ($SD = 3.08$). Zero-order correlations were used to examine bivariate relationships, and meaningful correlations were found among the variables (see Table 1).

**Multiple Regression Analyses**

To examine the relationship between the identity variables and family history knowledge among late adolescent university students beyond the bivariate level, four multiple regression models using sequential regression were computed. Autonomy, relatedness, commitment, and exploration were assigned as separate dependent variables. In the first block for each model
demographic variables (parent’s marital status, family of origin status, gender, and religiousness) were assigned as independent variables. In the second block for each model family history knowledge was added as an independent variable. Table 2 displays the correlations between the variables, the unstandardized regression coefficients (B) and the intercept, the standard errors (SE B), the standardized regression coefficients (β), R², and adjusted R² for each model.

In the first block predicting autonomy r² was not significantly different from 0 (r² = .018, p = .389). Adding family history knowledge led to a significant change in the model. Controlling for parent’s marital status, family of origin status, gender, and religiousness, family history knowledge was found to be a significant negative predictor of autonomy (β = -.267, p < .01). In the first block predicting relatedness, the model was significant, (r² = .044, p < .05), however, none of the t-tests for the coefficients were statistically significant. Multicollinearity was suspected. Family of origin status and female were found to be collinear. Family of origin status was removed from the model. In the new first block predicting relatedness, controlling for parent’s marital status and gender, religiousness was found to be a significant predictor of relatedness (β = .132, p < .05). Adding family history knowledge led to a significant change in the model. Controlling for parent’s marital status, gender, and religiousness, family history knowledge was found to be a significant predictor of relatedness (β = .402, p < .01). Family history knowledge was the strongest predictor of relatedness even though controlling for marital status, gender, and family history knowledge being religious was also a significant predictor of relatedness (β = .138, p < .05). In the first block predicting commitment, controlling for parent’s marital status, family of origin status, and gender, religiousness was found to be a significant predictor of commitment (β = .209, p < .01). Adding family history knowledge led to a
significant change in the model. Controlling for parent’s marital status, family of origin status, gender, and religiousness, family history knowledge was found to be a significant predictor of commitment ($\beta = .254, p < .01$). Family history knowledge was the strongest predictor of commitment even though controlling for marital status, gender, and family history knowledge being religious was also a significant predictor of commitment ($\beta = .213, p < .01$). In the first block predicting exploration, controlling for parent’s marital status, family of origin status, and gender, religiousness was found to be a significant negative predictor of exploration ($\beta = -.185, p < .01$). Adding family history knowledge did not lead to a significant change in the model.

**Analysis of Variance**

Analysis of variance was also conducted to compare family history knowledge means with Stutman and Lich’s (1984) four family differentiation categories (Healthy Differentiation, Overinvolvement – Consonant type, Overinvolvement – Dissonant type, and Underinvolvement). Results indicated those subjects who were classified as healthily differentiated also scored high on family history knowledge (see Table 3). As expected, categories with lower levels of autonomy (Overinvolvement-Consonant and Overinvolvement—Dissonant) also had high family history knowledge scores. Results also indicated a significant difference between categories ($F(3, 233) = 14.74, p < .001$) (see Table 4). A Tukey’s Post Hoc (see Table 5) indicated Healthy Differentiation, Overinvolvement-Consonant, and Overinvolvement—Dissonant differed significantly from the Underinvolvement category characterized by higher autonomy and lower family history knowledge scores.
Discussion

This study sought to gain insights into how family history knowledge influences identity development in late adolescent university students through both the individual developmental and family systems perspectives. From a family systems perspective findings indicate when controlling for parent’s marital status, family of origin status, gender, and religiousness, family history knowledge contributes to relatedness. This is consistent with previous research (Fivush et al., 2008; Gagalis-Hoffman, 2004; Pratt & Fiese, 2004). This is an important finding, as family systems theorists argue secure family relations provide the basis for successful individuation, autonomy achievement, and identity development (Anderson & Sabetelli, 1990; Hartup, 1983; Mathies & Adams, 2004; Perosa et al., 2002). In addition, a substantial body of evidence exists suggesting parents who have positive connections with their children (and who encourage children’s personal expression and exploration) contribute to adolescent identity achievement (Adams, 1998; Grotevant, & Cooper, 1985; Mathies & Adams; McElhaney et al., 2008; Perosa et al.; Steinberg, 1990). In this context family history knowledge contributes to building a sense of relatedness between adolescents and parents.

In accordance with Pratt and Fiese (2004), who argue adolescents draw on family stories and traditions to construct a sense of self through exploring roles and values, it was proposed family history knowledge would contribute to increased autonomy. Regression analysis indicated a significant negative relationship between family history knowledge and autonomy. However, analysis based on Stutman & Lich’s (1984) family differentiation categorization system suggests it is possible to have a high level of family history knowledge and achieve healthy differentiation. Family history knowledge may be most effective for influencing healthy
differentiation (high autonomy and high relatedness) when parents overtly encourage personal role and values exploration when utilizing family history stories and activities.

From an individual developmental perspective findings indicate family history knowledge contributes to increased commitment. This is consistent with previous findings. Gagalis-Hoffman (2004) and Hammond (2001) suggested one’s kinship with story characters and exploration of family historical traditions and values leads to increased commitment to emulate similar traditions and values. In this way family history knowledge may support the need for individuals to make commitments relative to roles, ideals, and interpersonal values. This leads to the pursuit of self-directed occupational and ideological goals (Marcia, 2002).

The data did not indicate a significant relationship between family history knowledge and exploration. To be effective as a tool for identity exploration, the use of family history knowledge may have to be facilitated by parents in such a way as to promote exploration. For example, parents may need to actively encourage their adolescent children to use family history stories and other family history activities as tools and opportunities for exploring roles, ideals, and relationship models. As already noted positive relationships with parents and parental promotion of free expression and encouragement of exploration contribute to identity development.

Religion was also found to be a predictor of relatedness and commitment. This is consistent with Pearce and Axinn (1998) and Mahoney and Tarakeshwar (2005) who both reported ties between religion and family cohesiveness and commitment. This is a likely consequence given most religions promote the importance of family relationships and family values, and obedience to moral laws.
Implications for Practice

Findings from this study indicate that family history knowledge may be a useful tool for influencing components of identity development. This has practical implications for parents and others such as teachers, youth workers, social workers, and youth program designers whose work is directed at enhancing adolescent development. Given the significant relationship between family history knowledge and parent-adolescent relatedness, it would seem important to educate parents about the value of utilizing family history stories to strengthen family relationships. It would also be important to show parents how to do so in ways optimal for individual autonomy achievement. For example, showing parents how to facilitate freedom of expression, personal choice, and personal exploration when utilizing family history stories and activities.

Further, as indicated in the introduction, NHF, a family history charity based in Australia, has previously conducted four applied ancestry programs (programs in which reviewing and reflecting on family history stories was a main component). The results of this study will provide the theoretical basis for the design of the next applied ancestry program. Specifically, program planners will seek to promote enhanced family connectedness while seeking to facilitate personal exploration and freedom of expression through guided use of family history resources and activities. In addition, findings from the study will be utilized in the development of experimental applied ancestry curriculum materials to be tested in elementary and high schools. Similarly, the results of this study could be incorporated by programmers and teachers into other youth programs and school curriculum as one tool in the process of enhancing participant and student identity development.
Limitations and Future Research

There are some important limitations to the current study. The sample for this study was a convenience sample and results cannot to be generalized beyond the sample group. In addition, the sample was confined to 18-20 year old university students. Future research should include late adolescents who do not pursue higher education, younger adolescents, and those from other ethnicities. Another limitation is the way in which family history knowledge was measured in the current study. The current instrument does not seek information beyond the lifespan of grandparents. In the future, a research instrument designed to detect greater depth of ancestral knowledge (looking beyond the grandparent generation) should be adopted. The use of the median split to divide responses into one of the four family differentiation categories is also a limitation of the study, as no previous results indicating the medians of autonomy and relatedness were available as a comparison. Further, it should be noted this is a correlational study and will not allow for cause and effect conclusions. Finally, the cross-sectional nature of the current study is also a limitation. As such, in the future it would be important to conduct longitudinal studies.

Findings from this study suggest two other key areas of focus for future research. First, future research should examine how parental encouragement to use family history stories, and other family history activities, as avenues for personal exploration of roles, ideals, and interpersonal values impacts on role and values exploration and autonomy achievement. Second, future research should also examine whether teachers and youth program facilitators, acting in the role of mentors, can assist adolescents to utilize family history knowledge to promote personal exploration, increase commitment to personally chosen roles, ideals, and interpersonal
values, and promote a healthy balance between individual autonomy and family relatedness. In conclusion, this study represents the next step in an ongoing process to discover how family history knowledge can be utilized to strengthen individuals, families, and communities. As well as providing insights into the questions raised, we hope it will inspire others to pursue the subject matter and contribute to further understanding how this vast resource can be utilized for human development.
References


Unpublished manuscript, University of Guelph, Ontario, Canada.


Table 1

*Bivariate Correlations*

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*Note.* **p < .001; *p < .05*
Table 2

*Summary of Multiple Regression Equations*

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*Note.* aStep/Adopted is coded 0 for respondents with natural parents and 1 for respondents who have step parents or who are adopted.

bReligious is coded 0 for non religious and 1 for religious.

**$p < .001$; *$p < .05$**
Table 2 Continued

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*Step/Adopted is coded 0 for respondents with natural parents and 1 for respondents who have step parents or who are adopted.

bReligious is coded 0 for non religious and 1 for religious.

**p < .001; *p < .05
### Table 3

**Descriptives: Family History Knowledge and Stutman & Lich’s (1984) Differentiation Categories**

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<td>1.97</td>
<td>233 (within)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Overinvolvement-Dissonant</td>
<td>57</td>
<td>16.26</td>
<td>2.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Underinvolvement</td>
<td>75</td>
<td>14.55</td>
<td>3.59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Group sizes are unequal, however, as noted by Tabachnick and Fidell (2001), unequal n often reflects true differences in the nature of the population and efforts to artificially equalize them may distort the differences. Given the large F result it was determined the unequal group sizes would not lead to a Type 1 error.***p < .001*

### Table 4

**Analysis of Variance Family History Knowledge and Stutman & Lich’s (1984) Differentiation Categories**

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>356.292</td>
<td>3</td>
<td>118.764</td>
<td>14.737</td>
<td>.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1877.733</td>
<td>233</td>
<td>8.059</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2234.025</td>
<td>236</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. **p < .001*
Table 5

*Post Hoc Test: Tukey Multiple Comparisons (Family History Knowledge and Stutman & Lich’s (1984) Differentiation Categories)*

<table>
<thead>
<tr>
<th>(I) Differ</th>
<th>(J) Differ</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Differentiation</td>
<td>Differentiation</td>
<td></td>
<td></td>
<td></td>
<td>Bound</td>
</tr>
<tr>
<td>1.00 Healthy Differentiation</td>
<td>2.00</td>
<td>-.45805</td>
<td>.60186</td>
<td>.872</td>
<td>-2.0155</td>
</tr>
<tr>
<td></td>
<td>3.00</td>
<td>.79934</td>
<td>.62708</td>
<td>.580</td>
<td>-1.8233</td>
</tr>
<tr>
<td></td>
<td>4.00</td>
<td>2.51583*</td>
<td>.59941</td>
<td>.000</td>
<td>.9648</td>
</tr>
<tr>
<td>2.00 Overinvolvement - Consonant</td>
<td>1.00</td>
<td>.45805</td>
<td>.60186</td>
<td>.872</td>
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</tr>
<tr>
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<td>.50178</td>
<td>.062</td>
<td>-.0410</td>
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<tr>
<td></td>
<td>4.00</td>
<td>2.97388*</td>
<td>.46674</td>
<td>.000</td>
<td>1.7661</td>
</tr>
<tr>
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<td>-.79934</td>
<td>.62708</td>
<td>.580</td>
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<td>1.71649*</td>
<td>.49884</td>
<td>.004</td>
<td>.4257</td>
</tr>
<tr>
<td>4.00 Underinvolvement</td>
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<td>.59941</td>
<td>.000</td>
<td>-4.0669</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
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<td>.46674</td>
<td>.000</td>
<td>-4.1817</td>
</tr>
<tr>
<td></td>
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<td>-1.71649*</td>
<td>.49884</td>
<td>.004</td>
<td>-3.0073</td>
</tr>
</tbody>
</table>

*Note.* *The mean difference is significant at the 0.05 level.*
Figure 1

*Stutman & Lich (1984) Family Differentiation Categorization System*

<table>
<thead>
<tr>
<th>Category 1</th>
<th>Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Healthy Differentiation”</td>
<td>“Overinvolvement – Consonant Type”</td>
</tr>
<tr>
<td>(High Autonomy / High Relatedness)</td>
<td>(Low Autonomy / High Relatedness)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category 3</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Overinvolvement – Dissonant Type”</td>
<td>“Underinvolvement”</td>
</tr>
<tr>
<td>(Low Autonomy / Low Relatedness)</td>
<td>(High Autonomy / Low Relatedness)</td>
</tr>
</tbody>
</table>
Appendix A

Prospectus
Identity development is a major facet of overall human development, and it has been argued that identity development is an essential component in the transition from adolescence to adulthood (Adams, 1998; Adams, Berzonsky, & Keating, 2006; Erikson, 1985; Kleiber 1999; Marcia, 2002; Shaw, Kleiber, & Caldwell, 1995), and that failure to establish a positive identity may lead to maladaptations and malignancies, as well as endanger future development (Boeree, 1997).

Late adolescence is a particularly important time in the identity development process. (Adams, 1998; Adams et al., 2006; Erikson, 1959, 1968 & 1985; Marcia, 1980; Phoenix, 2001). It is during late adolescence that individuals experience, to varying degrees, a crisis brought on by the need to reconcile personal and social conflicts leading to a search for resolution and personal meaning and perspective about who one is (Adams). Central to the process of the crisis resolution is achieving the balance between the need to be a unique individual and the need to achieve a sense of belonging and connectedness, the balance between individual and social identity (Adams; Kleiber, 1999).

Two important perspectives from which researchers have sought to understand the identity development process are the individual developmental and family systems perspectives (Adams, 1998; Perosa, Perosa, & Tam, 2002; Sabatelli & Mazor, 1985), thus providing both psychological and sociological views of identity development. Although some argue that these two perspectives are not compatible (Slife & Williams, 1995), others contend that despite being
theoretically and methodologically distinguishable they share common theoretical roots and can be integrated (Davies & Cicchetti, 2004). In fact, according to Sabatelli and Mazor:

Both the family system and individual developmental perspectives are interdependent in that the individuation and identity formation process encompasses two frames of reference – the individual’s efforts towards separation from the family of origin and the impact of these efforts on identity formation and the family system as the social framework within which, and in relation to which, the individuation occurs (p. 619).

In general, these models emphasize the need for individuals to explore and make commitments to roles and ideals while negotiating the balance between autonomy and connectedness within family, peer, and other social relationships (Adams et al., 2006; Erikson, 1959 & 1968; Marcia, 2002; Perosa et al., 2002).

Given its potential to increase levels of family connectedness, while at the same time providing opportunities for role and ideology exploration, knowledge of family history may be one factor that contributes to identity development (Fivush, Bohanek, & Duke, 2008; National Heritage Foundation, 2002; Rancie, 2005).

In 2002, the National Heritage Foundation (NHF), a family history charity based in Australia, coined the term applied ancestry to describe the utilization of family history knowledge as an agent of change and growth for individuals, families, and communities. The NHF initiated a project to develop curriculum and program models based on this concept. As the project unfolded and pilot programs were designed and implemented, anecdotal perceptions and limited investigations (Brian Hill, personal communication, July 1, 2006) suggested that the most important way in which family history knowledge contributed as an agent of change and growth
for individuals, families, and communities was in the area of identity development; providing opportunities for the exploration of ideals, role models to emulate, and increased feelings of family connectedness.

Between 2002 and 2005, the NHF conducted four applied ancestry programs (programs in which reviewing and reflecting on family history stories was a main component): a) an eleven day hike in the Australian alps with a focus on family stories; b) a forty-two-day Anasazi therapeutic wilderness program with family history components added to the traditional program; c) an urban based youth program focused on developing role models from family history stories in Washington D.C.; and, d) a residential camp utilizing oral histories for black youth living in an inner city shelter in Johannesburg, South Africa. Although results varied, personal and family identity was a consistent theme noted across all programs. This was most evident from exit interviews with participants of the Johannesburg program, in which many spoke of an increased sense of family identity and connectedness leading one participant to comment, “I was kind of lost and didn’t know where I belonged and it was difficult for me to choose a culture… But suddenly now I know where I belong.” As stated by Dr. Brian Hill (personal communication, July 1, 2006):

Preliminary results … indicate that participants feel a new, keen sense of belonging and identity with their families. They articulate new goals for their future and express new hope in a more positive future for themselves. The participants also expressed a commitment to a future family and a resolve to pass on family information to their children, information that they had not had before.
Although of interest and valuable, these observations were drawn from qualitative interviews with a very small sample; thus, it was determined by program designers to conduct a more detailed and theory-based study on the relationship between an individual’s identity development and family history knowledge.

Hence, the purpose of this study is to explore the relationship between identity development and family history knowledge, with a particular emphasis on late adolescence.

Problem Statement

The problem of this study is to determine if there is a relationship between identity development (as measured by levels of exploration, commitment, autonomy, and relatedness) and family history knowledge in late adolescent university students.

Purpose of the Study

The purpose of this study is to establish evidence-based outcomes that may support the importance of family history knowledge because of its relationship to identity development in late adolescent university students. In addition, a significant relationship would establish grounds for a causal study to investigate the impact of family history knowledge on positive identity achievement.

Hypotheses

The study was designed to test the following null hypotheses (H₀):

1. H₀ : There is no relationship between identity development in late adolescent university students and family history knowledge.

   H₁ : There is a positive relationship between identity development in late adolescent university students and family history knowledge.
2. $H_0$ : There is no relationship between commitment to personally selected beliefs and values in late adolescent university students and family history knowledge.

$H_1$ : There is a positive relationship ($p < .05$) between commitment (commitment subscale of EIPQ questionnaire) to personally selected beliefs and values in late adolescent university students and family history knowledge.

3. $H_0$ : There is no relationship between exploration of life roles and ideological values and beliefs in late adolescent university students and family history knowledge.

$H_1$ : There is a positive relationship ($p < .05$) between exploration (exploration subscale of EIPQ questionnaire) of life roles and ideological values and beliefs in late adolescent university students and family history knowledge.

4. $H_0$ : There is no relationship between maintaining autonomy from the parental family in late adolescent university students and family history knowledge.

$H_1$ : There is a positive relationship ($p < .05$) between maintaining autonomy (autonomy subscale of PRI questionnaire) from the parental family in late adolescent university students and family history knowledge.

5. $H_0$ : There is no relationship between relatedness with parents in late adolescent university students and family history knowledge.

$H_1$ : There is a positive relationship ($p < .05$) between relatedness (relatedness subscale of PRI questionnaire) with parents in late adolescent university students and family history knowledge.

*Definition of Terms*

The following terms are defined to clarify their use in the study:
Adolescence. The pivotal developmental period that occurs between the ages of 10 years to 20 years of age (Lerner & Steinberg, 2004).

Autonomy. The ability to maintain a separate sense of self and to function in an autonomous, self-directed manner in relation to the parental family (Stutman, 1984).

Commitment. A decision to act in accordance with voluntarily selected beliefs and values, following a process of personal exploration (Phoenix, 2001).

Differentiation. A property of a family system; it refers to the ways in which psychological distances between family members are maintained and family system adaptations are made (Perosa et al., 2002).

Exploration. The process whereby individuals investigate and appraise the different beliefs and values of various domains (Phoenix, 2001).

Family history. The systematic narrative and research of past events relating to a specific family, or specific families.

Family history knowledge. Knowledge of the individuals, lineages, stories and past events that is the biography of a specific family. For the purpose of this study if an individual has a level of family history knowledge it is assumed that they have participated in some form of family history activity or pursuit such as family story telling, genealogical research, family reunion, etc.

Identity. A person’s stable, coherent, and integrated sense of self, that is, who one is and what one stands for as a member of society (Erikson, 1968).

Identity statuses. Four modes of identity found within late adolescents (foreclosure, diffusion, moratorium, and achievement) defined in terms of the presence or absence of exploration and commitment in two areas: occupation and ideology. (Marcia, 1980).
Individuation. A sharpened sense of one’s distinctness from others, a heightening of boundaries, and a feeling of self-hood and will (Josselson, 1980).

Relatedness. Emotional involvement and relatedness with one’s parents (Stutman, 1984).

Delimitations

The scope of this study has been restricted to the following delimitations:

1. The study will utilize a convenience sample of approximately 200 late adolescent university students. All of the subjects will be volunteers from Brigham Young University, Clemson University, Indiana University, Sacramento State University, Texas A&M, University of Utah, and other universities as necessary to meet the selected sample size.

2. The age of participants will be restricted to those whose age is 18 years to 20 years old.

3. Participants will need to have access to e-mail and be comfortable with the associated computer technology.

4. This study will only focus on one of many variables hypothesized to influence identity achievement.

Limitations

The results from this investigation will be interpreted considering the following limitations:

1. This is a correlational study and will not allow for cause and effect conclusions.

2. The nature of the convenience sample will not allow results to be generalized beyond the sample group.
3. The sample is not global, but is limited to United States college students and international students studying in the United States. Therefore, the sample is not representative of non-college student populations.

4. Online tests do not allow respondent’s concerns and questions to be addressed while completing the questionnaire, which may inhibit their ability to answer accurately.

Significance of the Study

Identity development is one of the essential components of human development (Adams, 1998; Erikson, 1985; Kleiber, 1999; Marcia, 2002). It is also argued that failure to establish a positive identity may lead to maladaptations and malignancies, as well as endangering future development (Boeree, 1997). Hence, it would seem reasonable to suggest that any information or methods that have the potential to contribute to adolescent identity development are worthy of further examination.

In considering what resources are available to assist adolescents in their quest for identity development, the NHF, an Australian based family history charity, points to the vast reservoirs of family history records being accumulated in both private and public collections. This represents a resource of knowledge that for the most part is underutilized. This important resource of knowledge has the potential to be utilized by program facilitators as a tool for identity development amongst late adolescents if a significant positive relationship between identity development and family history knowledge can be shown (NHF, 2002).

Others have suggested how this vast wealth of knowledge might be used in relation to identity achievement. McGoldrick (1995) claimed that knowing about our families, knowing the events and stories of the past and how the actions of the family have contributed to who we are,
helps us know ourselves better; thus we have more freedom and are better informed to make our own choices and live our own lives. She states:

By learning about your family and its history – and getting to know over several generations – what made family members tick, how they related, and where they got stuck, you can consider your own role, not simply as a victim or a reactor to your experiences but as an active player in interactions that repeat themselves. Learning about your family heritage can free you to change your future. (p. 21)

Others have suggested that family history stories can provide access to role models worthy of emulation (Gagalis-Hoffman, 2004). It has also been claimed that cultural, moral, social, and family values are passed on through the transmission of family history stories (Fiese, 1992; Neville, 2003). Finally, and most recently, Fivush et al., (2008) found that there was a strong positive relationship between preadolescence knowledge of family history and their well-being and sense of self.

Despite the importance of identity development in adolescence and the proposition by some that a knowledge of family history can positively influence this process, only a very small number of studies have considered the relationship between identity development and family history knowledge (Fivush et al., 2008; Gagalis-Hoffman, 2004; Hammond, 2001). This gap in the literature is made even more apparent by the response of R. Fivush (personal communication, February 18, 2009), primary author of The intergenerational self: Subjective perspective and family history, to an e-mail request for information about further references on the subject to which she replied “there is just not much out there on this question.”
Given the lack of research, the importance of identity achievement, and the potential power of family history knowledge to contribute to identity achievement this study is pertinent and relevant.
Chapter 2
Review of Literature

Identity development is an essential component in the transition from adolescence to adulthood (Adams, 1998; Adams et al., 2006; Erikson, 1985; Kleiber, 1999; Marcia, 2002). Identity has been a serious focus for scholars for many years (Adams; Adams et al.; Erikson, 1959, 1968; Marcia, 1980, 2002; Phoenix, 2001; Sabetelli & Mazor, 1985; Waterman, 1985), and, for the most part, they have sought to understand the individual’s struggle to psychologically separate from parents and seek autonomy (Kivel, 1998; Perosa et al., 2002). This process has been labeled individuation (Anderson & Sabetelli, 1990; Josselson, 1980; Marcia, 1980; Marcia, 1993; Sabetelli & Mazor). In recent times, however, scholars of intergenerational relationships have sought to understand the identity development process from a family systems perspective. They have considered the importance of adolescents remaining connected with their parents as they seek to disengage from them (Frank, Pirsch, & Wright, 1990; Grotevant & Cooper, 1985; Perosa & Perosa, 1993; Perosa, Perosa, & Tam, 1996; Ryan & Lynch, 1989; Steinberg, 1990). Further, Perosa et al. found evidence that high levels of family cohesion and positive family relationships contribute to the process of individuation and identity development.

Despite this focus on family relationships, however, only a handful of studies have examined the relationship between identity development and family history knowledge (Fivush et al., 2008; Gagalis-Hoffman, 2004; Hammond, 2001). These studies (Fivush et al.; Gagalis-Hoffman; Hammond) implied that knowledge of family history and participation in family history activities were factors that contributed to increased feelings of connection with family and an increased sense of identity. Given the importance of the role of identity development in
the maturing process, these emerging insights suggest it would be important to increase our understanding of the relationship between identity development and family history knowledge.

Hence, the purpose of this study is to examine the correlation between identity development in late adolescents and family history knowledge. For organizational purposes, the literature is presented under the following topics: (a) Identity; (b) Family Systems Framework; (c) Leisure and Identity Development; (d) Family Leisure and Identity Development; (e) Family History and Identity.

Identity

From the time one enters the world, each individual’s psychosocial development is influenced by a host of genetic, social, cultural, and environmental factors; all combining in various ways to shape personal identity (Fivush et al., 2008; Schachter, 2005; Shaw et al., 1995). The Erikson eight-stage psychosocial model of development is probably the most widely recognized theory of identity development (Adams, 1998; Marcia, 1993; Hammond, 2001; Phoenix, 2001). In this model, the development of a mature sense of identity is seen as a major component in the healthy psychological development of late adolescence (Erikson, 1968, 1985). According to Erikson (1959, 1968, 1985), the life-cycle is divided up into eight key stages. During each stage there is a psychosocial crisis; a consequence of contradictory personal characteristics. Identity-Identity Diffusion is the fifth stage, taking place during the critical transition from adolescence to adulthood. (Erikson, 1968, 1985; Marcia, 1980; Marcia, 1993; Marcia, 2002; Hammond). It has been suggested that failure to adequately resolve this identity crisis can lead to social and emotional deficiencies in adulthood (Marcia, 2002; Shaw et al.).
The development of a positive and secure identity involves gaining a strong *sense of self* (Fivush et al., 2008; Marcia, 2002). The process is one in which individuals must explore roles and values and make independent decisions and commitments. As Marcia states:

The process by which identity is formed consists of decision making and commitment, a process that, at best, is preceded by a period of exploring alternatives. Among the life areas in which exploration, decision making, and subsequent commitment take place are occupation; religious, political, and social beliefs; and interpersonal and sexual values. (p. 202)

To further clarify the process Marcia (1980, 2002) outlines four statuses of identity: (a) identity achievement; (b) foreclosure; (c) moratorium; and (d) identity diffusion. Each status represents a level of exploration and commitment. Identity achievement is reached after one has undertaken a process of exploration, has made decisions, and is now pursuing self-directed occupational and ideological goals. Foreclosure is a state in which one has committed to a set of values and beliefs and is pursuing an identified occupation, but there has been no individual exploration and this commitment has been based on parental views and values. Moratorium describes a state of active exploration where no commitment has yet been made. Finally, identity diffusion is a state where individuals have made no commitments and are not seeking to explore the available alternatives (Marcia, 1980, 2002).

Connected with this process of determining one’s own ideological and occupational identity is the need to psychologically separate self from parents and family and the ability to see oneself as a separate and distinct individual (Anderson & Sabetelli, 1990). This process of psychological separation has been labeled individuation (Josselson, 1980; Marcia, 1980; Marcia,
1993; Sabetelli & Mazor, 1985). From a psychoanalytical perspective, individuation is achieved when fusion with others ceases to exist (Anderson & Sabetelli). Fusion is defined as a state of embeddedness where there are no clear boundaries in relationships with others and emotional dependence on others is high (Perosa et al., 2002; Sabetelli & Mazor).

Obtaining a sense of self, however, is dialectic and, paradoxically, also requires the attainment of a sense of belonging or relatedness. This is acquired through connectedness with and acceptance and recognition from family and peers (Adams, 1998; Kleiber 1999; Muss, 1996; Perosa et al., 2002), and adolescents “are sometimes morbidly, often curiously, preoccupied with what they appear to be in the eyes of others as compared with what they feel they are” (Erikson, 1968, p.128). The peer group in particular has a strong influence on personal role, ideological, and relationship choices (Erikson, 1959; Hartup, 1983; Muss, 1996). According to Moore & Boldero (1991), the peer group provides feedback about how individuals are seen by others (contributing to self-discovery and self-concept), contribute to the process of establishing autonomy from parents, provide models to copy, provide an empathetic support base, and assist in the development of intimacy through reciprocity, compromise, and through the sharing of confidences. However, although a strong influence on individual identity development, the peer group does not completely remove the influence of the family (Hartup; Perosa et al.), and in fact it is argued that “secure family relations are the basis for entry into the peer system and success within it (Hartup, p.172). In this regard, family system theorists have argued that the developmental approach has not sufficiently emphasized the role of the family in the process of individuation (Anderson & Sabetelli, 1990; Sabetelli & Mazor, 1985).
Family Systems Framework

In addition to individuation, family system theorists also emphasize the importance of differentiation which is “defined as a property of a family system; it refers to the ways in which psychological distances between family members are maintained and family system adaptations are made” (Peroza et al., 2002, p. 237). Emerging in the early 1960s in response to clinical observations and needs (Broderick, 1993) family systems or family process theory has evolved to be a useful theoretical lens for researchers and a highly practical model for practitioners (White & Klein, 2008). According to Broderick, this theory “ranks as one of the most influential and generative of all the family conceptual frameworks” (p. 5). In essence, the theory states that families can be likened to a system (Broderick). Families, like systems, can be characterized as entities with the following attributes: (a) they have parts that are interconnected, (b) they interact with their environment, (c) they have boundaries that differentiate them from their environment and other external entities, (d) they generate outputs and receive feedback, (e) they have a variety of resources to deal with changes and the need to adapt, (f) they seek for equilibrium, and (g) they must be looked at as a whole (Broderick; White & Klein). In addition, systems theory also incorporates the idea that internal “social and spatial relationships between dyads must be managed so that individuals are protected from each other’s demands (buffering) and individuals are linked to each other (bonding)” (White & Klein, p. 169). According to family systems theorists, the family is an important social framework or system which contributes to individuation and identity development through the process of differentiation (Peroza et al.).

Differentiation is measured by the nature of interpersonal boundaries within the family system and the adaptability of the system to handle individual and family developmental changes.
Healthy functioning families have age appropriate levels of individuation and connectedness. They are characterized by high levels of intimacy and individuation, with individuals being able to seek individual autonomy while maintaining relatedness within a supportive family environment (Anderson & Sabetelli; Perosa et al.; Sabetelli & Mazor). In contrast, low functioning families are those in which there are high levels of fusion (high dependence by either parents or children or both) and the processes of the family system are designed to prop up such emotional dependencies; or in other words, children are not able to establish their own lives independent of their parents’ lives.

In summary, identity development is a critical component of the maturing process and requires an individual to successfully establish both psychological and structural autonomy through the process of personal and social exploration while maintaining intimate ties with parents and the family of origin; thus, family relationships play an important role in the individual’s identity development.

Leisure and Identity Development

Leisure has been defined as the pursuit of freely chosen activities in one’s free time (Edginton, Hudson, Dieser, & Edginton, 2004). In addition, leisure has also been more broadly defined to include activities that may not necessarily be freely chosen, but involve important social interactions and intrinsic meaning and importance for the participants (Shaw & Dawson, 2001). Shaw and Dawson classify this type of leisure as *purposive leisure* and identify family leisure initiated by parents for their children as an example of it. Leisure, whether defined traditionally or more broadly, includes a vast spectrum of activities ranging from hobbies such as craft, pottery and family history to large scale organized community sports (Edginton et al.).
A number of positive outcomes have been associated with leisure participation including good health, improved communication skills, the development of talents, positive social interaction, intellectual enhancement, increased self-esteem, and increased family cohesiveness and functioning (Edginton et al., 2004). It has also been argued that participation in leisure activities can have an impact on the development of identity for adolescents (Kivel, 1998; Kleiber, 1999). This view has been supported by a number of studies. Shaw et al. (1995) found a relationship between positive adolescent female identity development and participation in organized sports. Munson and Widmer (1997) found that thinking, contemplating and ethical leisure behavior were related to occupational identity for male and female university students. Duerden (2006) found that an adventure recreation program positively influenced the identity development of adolescent males and females.

In addition to personal aspects of identity (individual core characteristics), it has also been suggested that leisure can influence social identity (Kivel, 1998; Kleiber, 1999), or the way in which individuals perceive themselves in relation to others and the meanings they attach to such relationships. Given this, it is interesting to note that very little research has been conducted into the relationship between identity and family leisure; an important social context where, particularly in light of theories of identity, individuation, and differentiation, it would be logical to expect an influence on identity development.

Family Leisure and Identity Development

Family leisure has historically been examined using a marital variable (Holman, 1981; Holman & Jacquart, 1988; Miller, 1976; Orthner, 1975; Smith, Snyder, & Monsma, 1988) with findings being applied to the broader family context. Several notable exceptions to this are
studies conducted by Zabriskie (2000) and others who have examined the impact of family leisure using a number of family variables from multiple perspectives such as parents, children, and young adults (Taylor, 2005; Zabriskie & Freeman, 2004; Zabriskie, & McCormick, 2001, 2003). These studies have found significant relationships between participation in family leisure and cohesive family relationships. Of note, particularly in relation to the above discussion on differentiation, these studies utilized family systems theory as a key component of their theoretical framework.

There are also a limited number of studies that considered the relationship between family leisure and identity development, which primarily focused on family rituals (Fiese, 1992; Fivush et al., 2008; Gagalis-Hoffman, 2004; Hammond, 2001; Homer, 2006). Three of these studies suggested links between a person’s knowledge of family history and identity development.

*Family History and Identity*

In contrast to the limited literature on the relationship between family history knowledge and identity development, the pursuit of family history knowledge continues to grow in popularity. According to a survey conducted by the National Genealogy Society in the year 2000, the percentage of Americans interested in family history had risen from 45% in 1996 to 60% in 2000 (Drake, 2001). An Ancestry.com survey (2007) found that 83% of 18-34-year-olds were interested in learning their family history. Popularity is not the only aspect of family history growth; there are now vast reservoirs of family history records being accumulated in both private and public collections. This represents a resource of knowledge that for the most part is underutilized. This important resource of knowledge has the potential to be utilized by program
facilitators as a tool for identity development amongst late adolescents if a significant positive relationship between family history knowledge and identity development can be shown (NHF, 2002).

Both the individual developmental and family system perspectives provide insights into how this vast wealth of knowledge might be used in relation to identity development. Just as the identity process involves both an individual and a social process, so too can family history knowledge involve both individual reflection and social interaction.

In accordance with the individual developmental perspective, which suggests the need for personal exploration of roles and values (Adams, 1998; Erikson, 1968; Marcia, 2002), it has been shown that family history stories have the potential to provide role models to emulate, opportunities for values transmission, and opportunities for values and ideas reflection. Gagalis-Hoffman (2004) reported that “kinship with story characters appeared to increase desire in both parents and their…children to emulate the traits and characteristics ascribed to their ancestors in family stories” (p.41). While the idea of values transmission and reflection is highlighted by Hammond’s (2001) examination of family rituals as a mediating link between family environment and adolescent identity development, the results of which suggested that knowledge of the family’s historical traditions and values was important in building the next generation’s identity. In analyzing these results, he reported that, “One participant made a generational commitment to work, writing that in her (sic) family ‘we were raised with high values passed down through generations such as a strong work ethic and compassion for others’” (p. 80). Hammond also stated, “during these modern times of cross cultural living – [family] rituals hold the traditions to be passed from generation to generation” (p. 82).
Other writers have suggested similar links. Pratt and Fiese (2004) argue that adolescents “are seen as drawing on the cultural reservoir of [family] stories to provide elements from which the…sense of self is constructed” (p.17). Also, McGoldrick (1995) claims that knowing about our families, knowing the events and stories of the past and how the actions of the family have contributed to who we are, helps us know ourselves better; thus we have more freedom and are better informed to make our own choices and live our own lives. She states:

By learning about your family and its history – and getting to know over several generations – what made family members tick, how they related, and where they got stuck, you can consider your own role, not simply as a victim or a reactor to your experiences but as an active player in interactions that repeat themselves. Learning about your family heritage can free you to change your future. (p. 21)

In addition, however, to such individual perspectives and development, family history knowledge is inextricably connected to the family system (Fivush et al., 2008; Pratt & Fiese, 2004), thus it would seem reasonable to consider its influence on identity development from a family systems perspective. The literature suggests that family history knowledge influences identity development through the family system by creating connections and strengthening relationships (Fivush et al.; Gagalis-Hoffman, 2004; Hawkins & Doxey, 2001; McGoldrick, 1995; Pratt & Fiese), creating a feedback/input mechanism (Arnold, Pratt, Hicks, 2004; Fivush et al.; McGoldrick; Pratt & Fiese), and providing a resource for dealing with current system challenges including change and adaptation (McGoldrick).

Family stories link or connect generations, creating a sense of connectedness, belonging, and relatedness contributing to positive family relationships (Fivush et al.; Gagalis-Hoffman,
Family history stories, of both the living and the dead, form a feedback/input mechanism for individual family members, influencing one’s view of themselves (Fivush et al., 2008; McGoldrick, 1995; Arnold et al., 2004). As noted by Arnold et al., “The adolescent is exposed to and influenced by a range of significant others…all of whom contribute in various ways… to his or her construction of a personal belief system” (p.166). Fivush et al. explain how these significant others who influence adolescent identity development include both living and deceased family members:

Family stories, stories about shared family experiences, about the parents’ lives before the children were born, what parents’ childhoods were like, and stories of previous generations…create meaning beyond the individual, to include a sense of self through historical time and in relation to family members…Part of who I am is defined by the experiences of my parents, and their parents before them…By the time children enter school, they…are becoming intrigued with how to make sense of their own lives in the context of other people’s lives. (p.4)
Finally, systems have a variety of resources to deal with change and the need to adapt (Broderick, 1993; White & Klein, 2008) – in the family system past family experiences, embedded in family historical stories, provide a resource for understanding how to change and adapt in the present (McGoldrick, 1995).

Despite these insights and the fact that many have suggested a relationship between family history knowledge and positive identity development, only one study (Fivush et al., 2008) was found that specifically sought to measure this relationship. Interestingly, this study found that there was a strong relationship between preadolescents’ knowledge of family history and their well-being and sense of self. As stated by Fivush et al.:

Preadolescence (sic) that develop a sense of self as embedded in both a shared and intergenerational family context show higher levels of self-understanding and well-being compared to their peers who do not know their family history as well, suggesting that the development of an intergenerational self, a self embedded in a larger familial history, may be a resilience factor as children approach adolescence (p. 140).

This finding supports the idea that a sense of self or identity is influenced not only by our immediate family, but also by our knowledge of extended family, both living and dead. This gives us a sense of self through time and provides “powerful models, frameworks, and perspectives for understanding our own experiences” (Fivush et al., 2008, p. 131).

Clearly, there is sufficient evidence to suggest that further investigation of the effect family history knowledge has on identity development is warranted. In addition, the literature reviewed suggests that in considering the influences of family history knowledge on identity development the need for both uniqueness and connectedness should be considered. That is,
consideration should be given to the process of exploration and commitment as well as to autonomy and relatedness. Further, the findings of Fivush et al., (2008), that there was a strong relationship between preadolescents’ knowledge of family history and their well-being and sense of self, raises the question of whether such outcomes would be replicated for late adolescent university students. Therefore, the purpose of this study is to further test the relationship between identity development (as measured by levels of exploration, commitment, autonomy, and relatedness) and family history knowledge in late adolescent university students.
Chapter 3

Methods

The purpose of this study is to determine if there is a relationship between identity development (as measured by levels of, exploration, commitment, autonomy, and relatedness) and family history knowledge in late adolescent university students. The contents of this chapter will include the following organizational steps: (a) Selection of Subjects; (b) Instrumentation: Validity and Reliability; (c) Collection of the Data; and (d) Treatment of the Data.

Selection of Subjects

The population from which the sample will be drawn is late adolescent university students. It is during late adolescence that individuals experience, to varying degrees, a crisis brought on by the need to reconcile a number of dialectic components of personal, family, and community life which leads to a search for resolution and personal meaning and perspective (Adams, 1998). Further, although a lifelong process (Marcia, 1980), it is in late adolescence that the quest for identity is strongest.

The study will utilize a convenience sample of approximately 200 late adolescent university students. The sample size was determined by a power analysis. All of the subjects will be volunteers from Brigham Young University, Clemson University, Indiana University, Sacramento State University, Texas A&M, University of Utah, and other universities as necessary to meet the selected sample size. These universities have been selected in order to obtain a diverse sample from across different parts of the United States. The main criteria for participation will include being aged between 18 and 20 years old, and all subjects being enrolled in one of the universities identified.
Instrumentation: Validity and Reliability

Two measures have been selected to assess the identity status of the subjects: the Ego Identity Process Questionnaire (EIPQ) (Balistreri, Busch-Rosswagel, and Geisinger, 1995) and the Parental Relationship Inventory (PRI) (Stutman & Lich, 1984). The first measure is designed to assess the identity development components of exploration and commitment (Balistreri et al., 1995), while the second measure is designed to assess the identity development components of autonomy and relatedness (Lich, 1985; Stutman, 1984). A third measure, the Do You Know? (DYK) scale (Duke, Lazarus, & Fivush, 2008), will be utilized to measure family history knowledge.

Parental Relationship Inventory. The PRI consists of 50 multiple choice questions which provide a series of descriptive and attitudinal statements concerning a respondent’s relations with his or her parents. The PRI was developed for use with young adults, and is comprised of six scales designed to measure key facets of parent/child differentiation. In developing the PRI, however, the authors created an alternative scoring system utilizing only two of the six scales, Autonomy and Relatedness, thus reducing the number of questions to 25 (see Appendix A). “This alternative scoring system…is briefer and easier to implement and allows for the categorization of 100% of the subjects in any population” (Stutman, 1984). Each item is answered on a 4-point Likert-type scale ranging from 4 (strongly agree) to 1 (strongly disagree) (Stutman). The Cronbach’s alpha coefficients has been reported as .79 for autonomy and .95 for relatedness (Stutman). In terms of validity the PRI scales discriminated individuals who sought psychotherapy from those who had not (Stutman).
Ego Identity Process Questionnaire. The EIPQ is a 32-item questionnaire (see Appendix B) designed to assess exploration and commitment within four ideological domains (politics, religion, occupation, and values) and within four interpersonal domains (friendships, dating, sex roles, and family). Each item is answered on a six-point Likert scale ranging from 6 (strongly agree) to 1 (strongly disagree). Item scores are summed separately for each dimension providing individual total scores for both exploration and commitment. The Cronbach’s alpha value for the overall exploration scale has been reported as 0.76, and the test–retest reliability coefficient for this scale as 0.90. The Cronbach’s alpha value for the commitment scale has been reported as 0.75 with a test–retest reliability coefficient of 0.76 (Balistreri et al., 1995). A median split technique can also be utilized to determine the identity status of participants. For both exploration and commitment, scores falling on or above the median are classified as high, the remainder, low. Identity status categories are assigned based on these median splits, using medians provided by Balistreri et al.

Do You Know. The DYK is a 20-item yes or no questionnaire designed to measure family history knowledge (see Appendix C). The scale tests respondent’s knowledge of key family members, major events, places lived, occupations, and family anecdotes. Each item on the questionnaire is worth 1 point, and the higher the score the higher the knowledge of family history (Duke et al., 2008).”

Reliability was tested with a four-week test–retest with the result being a coefficient of .93, indicating stability of scores over time (Duke et al., 2008). Speaking of the validity of their results, Duke et al. also point out that the results from this measure correlate strongly with a number of personality behavior variables (locus of control; Rosenberg self-esteem; family
functioning; family traditions; children’s manifest anxiety) providing evidence for the validity of the measure.

Collection of the Data

Data collection will be via an online questionnaire. A link to the questionnaire will be e-mailed to professional associates at each of the selected universities (Brigham Young University, Clemson University, Indiana University, Sacramento State University, Texas A&M, University of Utah, and other universities as necessary to meet the selected sample size) who will invite students in each of their classes to participate in the study. The email will include a description of the study, the nature of the questionnaire, the estimated time it will take to complete, the amount of compensation, and a link to the online informed consent and questionnaire. This description is to be printed out and provided to all interested parties. The informed consent (see Appendix D) will be included as part of the online questionnaire and participants will not be able to complete the survey until they have completed the consent form. Online responses will be accepted until 200 samples have been collected.

Treatment of the Data

To test the relationship between identity development (as measured by levels of exploration, commitment, autonomy, and relatedness) and family history knowledge, statistical analysis will be performed using SPSS version 16.0. Preliminary analysis will include instrument reliability tests. Hypotheses will be tested using multiple regression analysis with identity measures (exploration, commitment, autonomy, and relatedness) as the dependent variables and family history knowledge and standard demographic variables such as gender, university, religion, parental marital status, and family of origin status as independent variables. Given the
exploratory nature of this study, significant relationships will be considered at $p < .05$.

Appropriate tests for co-linearity and homo-scedasticity will be performed.
References


Unpublished manuscript, University of Guelph, Ontario, Canada.


Davies, P. T. & Cicchetti, D. (2004). Toward an integration of family systems and
developmental psychopathology approaches. *Development and Psychopathology, 16*(3),
477-481.

California State University, Fullerton.

adventure recreation and adolescent identity development*. Unpublished master’s thesis,
Brigham Young University, Provo, UT.

index of psychological well-being and prognosis: A brief report. *Psychotherapy Theory,
Research, Practice, Training, 45*(2), 268-272.


(pp. 18-171). New York: International Universities Press.


Appendix A-1

Parental Relationship Inventory (PRI)

PARENTAL RELATIONSHIP INVENTORY (PRI)

Directions

The following statements refer to your current relationship with your parent(s). If you were not reared by your natural parent(s), please respond to the statements in terms of the person(s) who primarily reared you during your growing years (until age 18). I want to emphasize that throughout this questionnaire, THE TERM "PARENTS" REFERS TO THE PERSON OR PERSONS WHO PRIMARILY REARED YOU AND WHOM YOU THINK OF AS YOUR PARENT(S).

If your parents are no longer living, please respond to the statements as you remember the relationship to have been as well as how you imagine the relationship would be today if your parents were living. However, if you have one remaining parent, please respond to the statements in terms of your relationship with that parent.

You may find that some of the statements fit your relationship with one parent more accurately than they fit for the other parent. In such an instance, please decide what is your strongest overall impression of your relationship with your parents and answer accordingly.

Read each statement carefully and think about how accurately the statement reflects your relationship with your parent(s). You will notice that there are four numbers next to each statement. Use the number "4" to indicate "Strongly Agree", the number "3" to indicate "Agree", the number "2" to indicate "Disagree", and the number "1" to represent "Strongly Disagree". Please circle the number which best describes your agreement or disagreement with each statement.

For example, with regard to the statement:

I enjoy being with my parents.

Strongly Agree Agree Disagree Strongly Disagree

4 3 2 1

If you strongly agree with that statement, you would circle the number "4".

I enjoy being with my parents.


Please respond to each statement on the questionnaire to the best of your ability. Do each statement one right after another. Do not leave out any items. Remember, there are no right or wrong answers.
1. It is fun to be with my parents.  
   | Strongly Agree | Agree | Disagree | Strongly Disagree |
   | 4             | 3     | 2        | 1                 |

2. I can still feel good about myself, even when my parents are upset with me.  
   | Strongly Agree | Agree | Disagree | Strongly Disagree |
   | 4             | 3     | 2        | 1                 |

3. My parents treat me as if I were the most important person in their lives.  
   | Strongly Agree | Agree | Disagree | Strongly Disagree |
   | 4             | 3     | 2        | 1                 |

4. When I'm trying to reach a goal, I can't depend on my parents for encouragement.  
   | Strongly Agree | Agree | Disagree | Strongly Disagree |
   | 4             | 3     | 2        | 1                 |

5. My parents don't seem to recognize that I've grown up.  
   | Strongly Agree | Agree | Disagree | Strongly Disagree |
   | 4             | 3     | 2        | 1                 |

6. If I were in financial trouble, I would feel comfortable asking my parents to lend me money.  
   | Strongly Agree | Agree | Disagree | Strongly Disagree |
   | 4             | 3     | 2        | 1                 |

7. My parents need me to keep them from being lonely.  
   | Strongly Agree | Agree | Disagree | Strongly Disagree |
   | 4             | 3     | 2        | 1                 |

8. Many times when something happens to my parents, I feel like it's happening to me.  
   | Strongly Agree | Agree | Disagree | Strongly Disagree |
   | 4             | 3     | 2        | 1                 |

9. I generally consult my parents before making important decisions.  
   | Strongly Agree | Agree | Disagree | Strongly Disagree |
   | 4             | 3     | 2        | 1                 |

10. My parents respect my desire to be an independent person.  
    | Strongly Agree | Agree | Disagree | Strongly Disagree |
    | 4             | 3     | 2        | 1                 |

11. My parents do not need me to make them feel proud of their own lives.  
    | Strongly Agree | Agree | Disagree | Strongly Disagree |
    | 4             | 3     | 2        | 1                 |

12. When I'm having trouble making a decision, it really helps to have my parents provide direction for me.  
    | Strongly Agree | Agree | Disagree | Strongly Disagree |
    | 4             | 3     | 2        | 1                 |

13. My parents frequently let me know that their generation knows best.  
    | Strongly Agree | Agree | Disagree | Strongly Disagree |
    | 4             | 3     | 2        | 1                 |

14. My parents accept my need for privacy.  
    | Strongly Agree | Agree | Disagree | Strongly Disagree |
    | 4             | 3     | 2        | 1                 |

15. I feel that my parents try to make me responsible for their happiness.  
    | Strongly Agree | Agree | Disagree | Strongly Disagree |
    | 4             | 3     | 2        | 1                 |

16. My parents want to know all my thoughts.  
    | Strongly Agree | Agree | Disagree | Strongly Disagree |
    | 4             | 3     | 2        | 1                 |

17. I am able to put my own needs before those of my parents.  
<pre><code>| Strongly Agree | Agree | Disagree | Strongly Disagree |
| 4             | 3     | 2        | 1                 |
</code></pre>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18. In my relationship with my parents, I often feel like an &quot;orphan&quot;.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>19. I don't feel it's my job to make my parents happy.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>20. I avoid asking my parents for their emotional support.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>21. I run my own life without needing my parents' direction.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>22. When I'm feeling bad, my parents show little interest in my feelings.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>23. My parents don't try to influence the decisions I make.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>24. It's hard not to feel like a child when I'm with my parents.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>25. It is all right with my parents if I disagree with them.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>26. My parents and I feel like strangers to one another.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>27. I feel happy when I'm with my parents.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>28. My parents feel the most useful when they are in the &quot;parent&quot; role.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>29. When I'm ill, I avoid asking my parents for sympathy.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>30. I often don't do things my way because it would upset my parents.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>31. When I'm feeling bad, I can count on my parents to remind me of my worth.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>32. I feel uncomfortable keeping secrets from my parents.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>33. My parents can only feel successful if I'm doing well.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>34. The relationship I have with my parents feels like a relationship between equals.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>35. It is important to me that my parents approve of the way I am handling my life.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
36. If I needed practical help, I would prefer not to go to my parents for it.  
   Strongly Agree  Agree  Disagree  Strongly Disagree  
   4  3  2  1

37. I feel tense when I'm around my parents.  
   4  3  2  1

38. My parents don't try to tell me how to run my life.  
   4  3  2  1

39. I can't rely on emotional support from my parents.  
   4  3  2  1

40. My parents rely more on others for companionship than they do on me.  
   4  3  2  1

41. I don't need to tell my parents all about what's happening in my life.  
   4  3  2  1

42. When my parents give me things, there are generally "strings attached".  
   4  3  2  1

43. My parents are able to talk to me as one adult to another.  
   4  3  2  1

44. I feel that my parents try to interfere in my personal business.  
   4  3  2  1

45. I feel comfortable having different beliefs and values from my parents.  
   4  3  2  1

46. If my parents feel sad or disappointed about something, it's hard for me to enjoy myself.  
   4  3  2  1

47. My parents and I don't seem to have very much in common with each other.  
   4  3  2  1

48. I find it hard to go against my parents' advice.  
   4  3  2  1

49. My parents often insist on making me see things their way.  
   4  3  2  1

50. I feel very warmly towards my parents.  
   4  3  2  1
Description of Items in Each Scale of the Parental Relationship Inventory

<table>
<thead>
<tr>
<th>Scale</th>
<th>P.R.I. Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>2, 8, 9, 12, 17, 19, 21, 30</td>
</tr>
<tr>
<td></td>
<td>32, 35, 41, 45, 46, 48</td>
</tr>
<tr>
<td>Respect for Boundaries</td>
<td>10, 14, 16, 23, 25, 38, 42, 44, 49</td>
</tr>
<tr>
<td>Relatedness</td>
<td>1, 4, 18, 22, 26, 27, 31, 37, 39, 47, 50</td>
</tr>
<tr>
<td>Mutuality</td>
<td>5, 13, 24, 34, 43</td>
</tr>
<tr>
<td>Self-Focus</td>
<td>3, 7, 11, 15, 28, 33, 40</td>
</tr>
<tr>
<td>Supply-Seeking</td>
<td>6, 20, 29, 36</td>
</tr>
</tbody>
</table>
Alternative or Simplified Categorization Scheme for the Parental Relationship Inventory

Category 1: Healthy Differentiation
- High Autonomy
- High Relatedness

Category 2: Overinvolvement - Consonant type
- Low Autonomy
- High Relatedness

Category 3: Overinvolvement - Dissonant type
- Low Autonomy
- Low Relatedness

Category 4: Underinvolvement
- High Autonomy
- Low Relatedness
Appendix A-2

Ego Identity Process Questionnaire

FAMILY HISTORY AND IDENTITY ACHIEVEMENT

+C (1) I have definitely decided on the occupation I want to pursue.
+C (2) I don't expect to change my political principles and ideals.
+E (3) I have considered adopting different kinds of religious beliefs.
-E (4) There has never been a need to question my values.
+C (5) I am very confident about what kinds of friends are best for me.
-E (6) My ideas about men's and women's roles have never changed as I became older.
+C (7) I will always vote for the same political party.
+C (8) I have firmly held views concerning my role in my family.
+E (9) I have engaged in several discussions concerning behaviors involved in dating relationships.
+E (10) I have considered different political views thoughtfully.
-E (11) I have never questioned my views concerning what kind of friend is best for me.
-C (12) My values are likely to change in the future.
+C (13) When I talk to people about religion, I make sure to voice my opinion.
-C (14) I am not sure about what type of dating relationship is best for me.
-E (15) I have not felt the need to reflect upon the importance I place on my family.
-C (16) Regarding religion, my beliefs are likely to change in the near future.
+C (17) I have definite views regarding the ways in which men and women should behave.
+E (18) I have tried to learn about different occupational fields to find the best one for me.
+E (19) I have undergone several experiences that made me change my views on men's and women's roles.
+E (20) I have consistently re-examined many different values in order to find the ones which are best for me.
-C (21) I think what I look for in a friend could change in the future.
+E (22) I have questioned what kind of date is right for me.
+C (23) I am unlikely to alter my vocational goals.
+E (24) I have evaluated many ways in which I fit into my family structure.
+C (25) My ideas about men's and women's roles will never change.
-E (26) I have never questioned my political beliefs.
+E (27) I have had many experiences that led me to review the qualities that I would like my friends to have.
+E (28) I have discussed religious matters with a number of people who believe differently than I do.
-C (29) I am not sure that the values I hold are right for me.
-E (30) I have never questioned my occupational aspirations.
-C (31) The extent to which I value my family is likely to change in the future.
+C (32) My beliefs about dating are firmly held.

C indicates commitment; E indicates exploration; + indicates a positively-worded item; - indicates a negatively-worded item.

A copy of the EIPQ with instructions to the respondent may be obtained from the author.
Appendix A-3

Do You Know? (DYK) Scale
Do You Know? (DYK) Scale
(Duke, Lazarus, & Fivush, 2008)

The “Do You Know . . . ?” (DYK) Scale

Please answer the following questions by circling “Y” for “yes” or “N” for “no.” Even if you know the information we are asking about, you don’t need to write it down. We just wish to know if you know the information.

1. Do you know how your parents met?
   Y  N
2. Do you know where your mother grew up?
   Y  N
3. Do you know where your father grew up?
   Y  N
4. Do you know where some of your grandparents grew up?
   Y  N
5. Do you know where some of your grandparents met?
   Y  N
6. Do you know where your parents were married?
   Y  N
7. Do you know what went on when you were being born?
   Y  N
8. Do you know the source of your name?
   Y  N
9. Do you know some things about what happened when your brothers or sisters were being born?
   Y  N
10. Do you know which person in your family you look most like?
    Y  N
11. Do you know which person in the family you act most like?
    Y  N
12. Do you know some of the illnesses and injuries that your parents experienced when they were younger?
    Y  N
13. Do you know some of the lessons that your parents learned from good or bad experiences?
    Y  N
14. Do you know some things that happened to your mom or dad when they were in school?
    Y  N
15. Do you know the national background of your family (such as English, German, Russian, etc.)?
    Y  N
16. Do you know some of the jobs that your parents had when they were young?
    Y  N
17. Do you know some awards that your parents received when they were young?
    Y  N
18. Do you know the names of the schools that your mom went to?
    Y  N
19. Do you know the names of the schools that your dad went to?
    Y  N
20. Do you know about a relative whose face “froze” in a grumpy position because he or she did not smile enough?
    Y  N
Appendix A-4

Informed Consent Form
Informed Consent Form

Introduction

This research study is being conducted by Clive Haydon B.A. and Brian Hill, Ph.D., at Brigham Young University. The study has been designed for young adult university students, in an effort to better understand the relationship between identity development in late adolescents and family history knowledge. You have been invited to participate in this study as a university student aged between 18 and 20 years.

Procedures

The survey consists of 77 questions and will take approximately 15 minutes to complete. You will be asked to respond to a variety of questions related to your ideals, roles, relationship with parents, and your knowledge of your family’s history.

Risks/Discomfort

Minimal discomfort is possible when answering questions regarding identity and family history.

Benefits

There are no direct benefits to subjects. Taking this survey will benefit researchers as they seek to understand identity development as it relates to family history knowledge.

Compensation

The first 200 respondents will receive compensation in the form of a $5.00 Amazon gift voucher. Once you have completed the Qualtrics questionnaire, you will find a link taking you to a separate website where you will be able to send an email requesting a gift voucher. On this page, you will find an electronic gift voucher request form instructing you to insert an email
address to which your voucher can be sent. You will receive a return email with the gift voucher attached within three days. This webpage will also provide notification when the limit on vouchers has been reached.

Confidentiality

All data will be stored on a secure server and handled only by the Principal Investigator. Every effort will be made to protect your confidentiality.

Participation

Your participation in taking this survey is completely voluntary. You may refuse to participate or withdraw at any time. You participation is not in any way connected with your academic course work.

Questions about the Research

If you have questions regarding this study you may contact Clive Haydon at (801) 422-1287; email, cghaydon@bigpond.com or Dr. Brian Hill at (801) 422-1287; email, brian_hill@byu.edu. If you have questions regarding your rights as a research participant, you may contact Christopher Dromey, PhD, IRB Chair, (801) 422-6461, 133 TLRB, Brigham Young University, Provo, UT 84602, Christopher_Dromey@byu.edu.

Completing this online survey indicates your willingness to participate as a research subject. Please answer each question honestly and to the best of your ability.