

IDENTITY AND YOUNG ADULT WELL-BEING: A CLOSER LOOK AT
IDENTITY STYLE AND IDENTITY STRUCTURE

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IDENTITY AND YOUNG ADULT WELL-BEING: A CLOSER LOOK AT
IDENTITY STYLE AND IDENTITY STRUCTURE

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DISSERTATION ABSTRACT

IDENTITY AND YOUNG ADULT WELL-BEING: A CLOSER LOOK AT
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The current study examined identity from the Eriksonian perspective, where identity guides an individual's experiences and future actions so as to promote the individual's fit into society (Erikson, 1959, 1968). Identity styles proposed by Berzonsky (1989) focus directly on the process of identity formation and reflect the ongoing construction and revision of identity throughout the life cycle. The concept of identity style refers to the handling of problems related to identity and structure demonstrates that important identity domains and elements are integrated as a whole and serves the function

of organizing one's identity. An individual's well-being (Ryff, 1989) indicates the extent to which a person fits within society. Very few studies in the literature have examined identity structure and well-being and no studies have tried to associate style, structure and well-being together. The purpose of the current study was to examine relations between identity style and identity structure (hierarchy and integration) and the associations between these two dimensions of identity and young adult well-being. Participants were 480 students recruited from a Southern university.

It was found that a person's preferred identity style (informational, normative, or diffuse) was consistent with the style used across domains at different levels of the identity hierarchy, and the salience of an identity domain appeared related to using the style most consistent with it. Informational and normative styles were found to be positively related to integration of structure, whereas diffuse style was negatively related to integration. Informational style was positively related to all indicators of well-being, and diffuse style showed the opposite pattern. Normative style was negatively related to autonomy, and positively related to positive relations with others and purpose in life. The salience of different identity domains also were related to well-being. Furthermore, identity structure integration was positively related to well-being, but only moderated the relationship between identity style and autonomy. In addition, gender moderated the relations between identity style and well-being. Implications for future research and directions are discussed.

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TABLE OF CONTENTS

LIST OF TABLES	x
LIST OF FIGURE	xii
.....	
LIST OF APPENDICES	xiii
INTRODUCTION.....	1
I. REVIEW OF LITERATURE.....	12
Theoretical Foundation.....	12
Identity styles.....	20
Identity structure.....	29
Research questions and hypothesis	41
II. METHODS.....	43
Participants.....	43
Measures	44
Procedure	51
III. RESULTS.....	52
Preliminary analyses	52
Results for the study questions and hypotheses	56
IV.....	79
DISCUSSION.....	
V. REFERENCES.....	95
VI. APPENDICES.....	104

LIST OF TABLES

Table 1: Gender Differences for Identity Styles.....	53
Table 2: Consistency of Using Each Style across Domains	54
Table 3: Identity Structure: Saliency of Each Domain	54
Table 4: Correlations among Subscales of Well-being.....	55
Table 5: Means and Standard Deviations of the Well-being Subscales	55
Table 6: Correlations between Global Style and Consistency of Style Used across Domains	56
Table 7: Relations between Global Style and Used at Different Levels of Hierarchy..	58
Table 8: Relations between Identity Style and Domain Saliency	59
Table 9: Gender Differences in Correlations between Identity Structure Integration and Identity Styles.....	60
Table 10: Relations between Global Style and Well-being.....	61
Table 11: Tests of Gender Moderation of the Relations between Global Identity Style and Well-being.....	63
Table 12: Correlation between Well-being and Identity Style Consistency	65

Table 13: Tests of Gender Moderation of the Relations between Identity Style

Consistency and Well-being..... 67

Table 14: Correlations between Salience of Identity Domains and Well-being.....	70
Table 15: Correlations between Well-being and Integration	71
Table 16: Predicting Well-being with Integration Curvilinearly	72
Table 17: Tests of Gender Moderation of the Relations between Identity Integration and Well-being	73
Table 18: Tests of Identity Structure Moderation of the Relations between Identity Style and Well-being	75

LIST OF FIGURE

Figure 1: Interaction between Identity Style and Structure in Predicting Well-being..... 78

LIST OF APPENDICES

Appendix A-1: General information in Questionnaire	104
Appendix A-2: CIQ Items and Style Definition	106
Appendix A-3: Identity Style Inventory	108
Appendix A-4: Identity Structure Measure: Consistency of Style Used in Domains.....	111
Appendix A-5: Identity Structure Measure: Domain Salience.....	113
Appendix A-6: Identity Structure Measure: Integration	114
Appendix A-7: Scales of Psychological Well-being	116
Appendix B-1: Cluster Standard	122
Appendix B-2: Change in Clusters between Half and Whole Sample.....	123
Appendix B-3: Description of Cluster Analysis.....	130
Appendix B-4: Correlations among Different Measures of Hierarchical Identity Structure.....	131
Appendix B-5: Salience Level of Each Domain	133
Appendix B-6: Post Hoc Testing Interactions between Global Identity Style and Gender in Predicting Well-being.....	134

Appendix B-7: Post Hoc Testing Integration between Consistency of Identity

Style	136
and Gender in Predicting Well-being	

Appendix B-8: Post Hoc Testing Interaction between Identity Style and Structure

in Predicting Well-being..... 140

INTRODUCTION

The concept of identity, although widely applied, continues to challenge researchers to define its properties. The goal of this study is to offer an in-depth look at two aspects of identity—how different identity domains relate to each other as a *structure*, and how identity is formed as a *process*. How well-being in young adulthood is associated with identity structure and style also will be examined. In the mid-twentieth century, the work of Erik Erikson and James Marcia set the foundation for identity scholarship. More recently, the contributions of Michael Berzonsky have offered a means (i.e., identity styles) for conceptualizing identity process and, in addition to Berzonsky, a number of identity theorists and researchers have provided important insights regarding the structure of identity.

Identity was assumed by Erikson (1959, 1968) to be the psychological meaning, sense or definition of oneself an individual develops through his or her experience in context. Identity integrates childhood experiences, current status and future expectations into a whole, and also integrates physiological growth, mental maturation, and social responsibility into that whole. Identity can help one to interpret a variety of experiences, and hence provide guidance for action. To form their identities, Erikson asserted that adolescents need to experience psychological moratorium. Moratorium is assumed to be a period of delay when a person is not ready to meet obligations and needs more time to explore options or to make a decision.

Erikson hypothesized that identity development affects an individual's development in every area. Beginning in adolescence, individuals start facing challenges across many aspects of life, such as: choice of educational attainment and occupation, competition in school and work, formation of intimate relationships, adaptation to greater independence and new environmental requirements, and construction of plans for future growth. Erikson believed that one had to have the ability of mastering the environment, to perceive oneself and the environment accurately, and to possess a unified personality in order to be a healthy adult. Identity was viewed as the key element for individuals to gain the necessary abilities for handling life challenges.

If by adulthood an individual failed to form an identity and ended up in identity diffusion, Erikson believed he or she was likely to have problems in well-being. For example, the person was likely to experience psychological problems, have trouble in school, and encounter difficulties in work, as well as in relationships with others (Erikson, 1959). Therefore, identity is a very important concept for understanding adjustment in adolescence and adulthood.

Erikson's theory, however, is very abstract. He proposed the concept of identity according to his clinical experience. Furthermore, it is difficult to measure the formation of identity or psychological moratorium. It also is hard to measure the formed identity and a person's feelings of continuity of self since Erikson did not elucidate the indicators of them.

To subject Erikson's theory to empirical testing, Marcia (1966) proposed the identity status paradigm. He established two dimensions: exploration, and commitment.

People may reach identity establishment through two paths: through exploration, or through the impact of childhood values. Those who have not established their identities are either not concerned, or are struggling to figure out who they are. Marcia formulated four identity statuses on the basis of these two dimensions: identity achievement (high exploration, high commitment), moratorium (high exploration, low commitment), foreclosure (low exploration, high commitment), and diffusion (low exploration, low commitment).

Marcia's identity status theory created the foundation for the empirical examination of identity. Over six hundred journal articles based on his paradigm have been published to date. His paradigm elaborates Erikson's theory from one perspective, and has had some success in capturing exploration and commitment, two vital elements in identity formation.

Erikson focused on a global construct in preference to the constituent elements, whereas Marcia's theory involved a number of specific domains of personal concern such as vocational, religious, political, recreational and relational domains. Marcia treated each person's identity as the summary of different domains. However, according to Erikson (1959), the hallmark of identity achievement should be the ability to resolve challenges and integrate past and current experiences, and guide future behavior rather than simply commitment to an occupation or an ideology.

Some researchers have reported discrepant findings for different domains of identity (e.g., a person is achieved in the occupational domain and diffused in the political ideology domain). For example, Goossens (2001) found low convergence in

identity statuses across domains (between ideological and interpersonal domains), and moderate convergence was found between global and domain specific identity statuses. Significant gender differences also were found in specific domains but not in global identity statuses.

Individuals might make commitments with or without exploration; even if they experience some exploration, it might not be complete. In other words, it is possible for individuals to engage in exploration and make commitments and still feel unhappy or unsuccessful. Waterman (1992) indicated feelings of personal expressiveness as a dimension additional to commitment and exploration. When identity-related activities are consistent with one's potentials, he or she will feel intense involvement, completeness or fulfillment. Thus, the process of reaching identity establishment is the process through which an individual identifies his or her potentials, i.e. discovering who one truly is. This dimension helps to explain the variability in how people define themselves.

The discrepancies between Erikson's theory and Marcia's paradigm in the definition of identity, the meanings of commitment and exploration, indicators of identity establishment, and issues pertaining to the different domains of identity have called for alternative approaches to the study of identity. One such approach is offered by Berzonsky, who has focused on the "process" of identity formation during the past decade and a half.

Berzonsky (1988) interpreted Erikson's theory of identity as a self-generated theory about the self. He proposed a feedback loop to represent self-theory structure and restructure. The self-theory or identity comprises cognitive schemata and scripted behavioral strategies for dealing with problems and experiences. To adapt, one has to

evaluate the effectiveness and success of an approach with available information. If the strategy chosen to solve the problem is unsuccessful, one has to revise and modify certain aspects of self theory. Behavioral adjustment may occur, with or without conscious awareness of cognitive work, should the strategies be ineffective. Berzonsky focused on the cognitive and behavioral components of the feedback loop in his conceptualization of identity style. A person's identity style determines how he or she interprets and uses identity relevant information.

Identity styles

Three identity styles were derived by Berzonsky (1989), the informational, normative and diffuse styles. Informational style refers to making decisions on the basis of the information being collected; normative style means making decisions on the basis of expectations of significant others; and diffuse style indicates avoidance of facing problems and making decisions. Identity style captures the process of identity formation which is relatively stable, whereas identity status suggests a temporary outcome. Identity style preferences are personally motivated and moderately or strongly related to personality, which tends to be stable (Berzonsky, 1990). During adolescence there may be considerable shifting in terms of the style used. At late adolescence, even though most people are capable of using any of the three styles, they will tend to use one style more than the others (i.e., they will have a dominant or preferred identity style).

Identity styles and well-being. Across the studies that have examined identity style and adjustment, diffuse/avoidant style has been found to be related to adolescent maladjustment (Adams, Munro, Doherty-Poirer, Munro, Perterson, & Edwards, 2001), procrastination (Ferrari, Wolfe, Wesley, Schoff & Beck, 1995), academic failure, and

ineffectiveness in personal relationships (Berzonsky & Kuk, 2000), as well as adults' difficulty in keeping jobs (Jones, Ross, & Hartmann, 1992; Cheek & Jones, 2001), and repeated crimes (White & Jones, 1996). Furthermore, diffuse/avoidant style was shown to be related to low self esteem, greater social anxiety, high self-handicapping tendencies, high depression (Ferrari, 1991; Nurmi, Berzonksy, Tammi, & Kinney, 1997), low autonomy (Berzonsky & Ferrari, 1996; Berzonsky & Kuk, 2000; Vleioras, 2002), difficulty in establishing and maintaining social support systems (Berzonsky & Kuk, 2000; Vleioras, 2002), low purpose in life and in school (Berzonsky & Kuk, 2000; Vleioras, 2002), low self-acceptance (Vleioras, 2002), low personal growth, and low environmental mastery (Vleioras, 2002). Informational style is comparatively more adaptive, associated with more efficiency in work and solving problems, more successful in education and career (Berzonsky & Kuk, 2000; Jones, Ross, & Hartmann, 1992) and less criminal behavior (White & Jones, 1996). Individuals using an informational style also have been shown to have high self-esteem, stability of self (Nurmi, Berzonksy, Tammi, & Kinney, 1997), and autonomy in decision making (Berzonsky & Ferrari, 1996; Berzonsky & Kuk, 2000; Vleioras, 2002), positive relationships with others (Berzonsky & Kuk, 2000; Vleioras, 2002), purpose in life and in school (Berzonsky & Kuk, 2000; Vleioras, 2002), high self-acceptance, high personal growth, and high environmental mastery (Vleioras, 2002). Across studies, normative oriented individuals typically were not as adaptive as information oriented individuals, but considerably more adjusted than diffuse oriented individuals. They had less problem behaviors, more stable self conceptions (Adams, Munro, Doherty-Poirer, Munro, Perterson, & Edwards, 2001; Jones, Ross, & Hartmann, 1992; Cheek & Jones, 2001), and higher environmental mastery

(Vleioras, 2002) than diffuse oriented individuals, but more recidivism than informational oriented individuals (White & Jones, 1996).

Identity structure

In addition to emphasizing process (style), Berzonsky also emphasized identity structure, the way identity is organized (Berzonsky, 1988). The concept of structure can be derived from Erikson's theory. According to Erikson (1968), a major function of identity is to integrate an individual's experiences in different situations into a whole and to integrate the individual and his/her social environment into a whole. However, the integration is not a simple summation. Rather, it is a complex arrangement of experiences and expectations across time and domains, that results in a person's identity structure.

Assessment of structure, therefore, promotes the understanding of the integration of different domains into a whole, that is, how an individual organizes his or her different identities. However, how to define and measure structure is a current concern in the identity field. The academic journal *Identity* offered a special issue on identity structure in 2003, and demonstrated varying views about its nature. According to Kroger (2003), identity develops through a soft-stage progression and invariant sequence over time, where structure gains wholeness, hierarchical integration, and universality. Others view identity structure as a development of the strength and quality of commitment which forms the basic unit of the interface between the person and context (Kunnen & Bosma, 2003), or as a temporal and spatial continuity where structure organizes experiences across time and different contexts (van Hoof & Raaijmakers, 2003). Van Hoof and Raaijmakers (2003) suggested that integration can be demonstrated by the

interrelationship between identities in different domains. Low interrelation indicates low integration and high interrelation suggests high integration.

In other work, Stryker (1980) suggested, from a symbolic interactionism perspective, that identity structure is a hierarchical organization in which the hierarchy is established on the basis of identity salience. Identity salience refers to the importance level of identity in different domains. The more important (salient) the specific identity, the more likely the identity-related behaviors are invoked across situations.

Identity structure is believed by some researchers to function as a filter that influences what information individuals will pay attention to, and how individuals interpret that information (Berzonsky, 2003b; Kroger, 1997, 2003; Levine 2003; Meijers, 1998). Others believe that identity structure affects what behaviors will be activated in certain situations (Stryker, 1980; Stryker & Serpe, 1982). As an abstract concept, no universal definition of structure exists. However, some common conceptualization is shared: identity structure is how an individual organizes and integrates experiences and identity elements into a whole; and the organization is assumed to be hierarchical (Berzonsky, 2003b; Kroger, 1997, 2003; Clarkson & Robey, 2000; Levine 2003; Meijers, 1998; Stryker, 1980; Stryker & Serpe, 1982; van Hoof & Raaijmakers, 2003; Vondracek, 2003;Wiley, 1991).

Only a modest amount of research has been conducted on identity structure. Most of the developmental research that has attempted to illustrate structure has only inferred structure based on identity status (Kroger, 1997, 2003) or style (Berzonsky, 2003b). For example, Berzonsky, Macek and Nurmi (2003) investigated the role of identity styles in the structural organization of one's identity. Structure was defined in terms of

commitment. High commitment was assumed to represent structural consolidation. It was found that informational style and normative style were related to firmer commitments and hence were assumed to have better elaborated and consolidated identity structure than diffuse style. Diffuse style was negatively related to commitment and was assumed to have a poorly integrated structure.

Berzonsky (1988, 2003b) assumed that informational style was related to a well-differentiated, hierarchically integrated structure; normative style was related to a rigid structure; and diffuse style was associated with a fragmented structure which is lacking overall integration coherence and unity. His assumption was supported by the empirical study mentioned above which measured structure with commitment (Berzonsky, et. al, 2003). However, no other studies have measured identity integration directly when attempting to examine the relation between style and structure.

Identity structure and well-being. Among the few studies that have examined the relationship between identity structure and well-being of individuals, identity salience has been shown to predict the effort individuals put in that salient identity domain and performance in that domain (Adler, & Adler, 1987; Callero, 1985; Laverie, & Arnett, 2000; Lobel, & Clair, 1992; Shih, Pittinsky, & Ambady, 1999). The salience of a particular identity also was found to be positively related to the stress associated with an inadequate performance of identity-confirming behaviors (Wiley, 1991). The relation between integration and well-being is hypothesized to be curvilinear. Too high or too low integration might be a risk for adolescents' adjustment (van Hoof, & Raaijmakers, 2002).

Summary

Berzonsky's theoretical assumptions offer guidance for new approaches to the study of identity. Erikson assumed that identity formation is a life long process. It is difficult to fully conceptualize or measure such a process using Marcia's paradigm. The identity styles approach assists with solving this dilemma by focusing directly on the process. The process dimension is useful for identifying the stability of characteristics of individuals relevant to the ongoing construction and revision of identity throughout the life cycle.

Identity structure provides a good description of identity outcome because it refers to how identity is organized across the different domains (e.g., vocational and relational identities). Thus, discrepant findings in different domains can be better explained by understanding structure. For example, Goossens (2001), using a Belgium sample, found that in the political domain, men were more in the achievement status and women were more in the diffused status. This can be explained by the differing salience of political domain in the structure. Young men in Belgium may think politics are more important and spend more time exploring this domain and make commitments to it. Young Belgian women may view politics as less relevant and spend less time exploring this domain.

Berzonsky did not offer a clear interaction pattern between structure and style. There is only one study (Berzonsky, Macek, & Nurmi, 2003) that dealt with the structure of identity and related it to process. But, the study focused on the stability of structure rather than the structure itself. Thus, more research is needed that examines the specific properties of structure and their associations with style.

Finally, identity has been theorized to relate to well-being (Erikson, 1959, 1968) and this relationship has gained some empirical support (e.g. Adams, Munro, Doherty-Poirer, Munro, Peterson, & Edwards, 2001; Berzonsky & Ferrari, 1996; Berzonsky & Kuk, 2000; Cheek & Jones, 2001; Nurmi, Berzonsky, Tammi, & Kinney, 1997; White & Jones, 1996). Indicators of well-being, autonomy, success in school and work, adaptation to environment, and purpose in life have been suggested to be related to identity and identity styles. But very few studies have examined identity structure and well-being and no studies have tried to associate style, structure and well-being together.

The purpose of the current study therefore, was (1) to examine relations between identity style and identity structure and (2) to assess associations between these two dimensions of identity and young adult well-being. Specifically, relations between identity style and identity structure (hierarchy and integration) were examined. In addition, associations between style, hierarchy and integration and young adult well-being in areas of self-development and adjustment within the environment were explored. How gender mattered for associations among style, structure and well-being also was assessed given the lack of consensus in the literature concerning gender and identity formation.

LITERATURE REVIEW

The purpose of this study was to examine linkages among identity style, identity structure, and well-being in early adulthood. The literature review is divided into three sections. In the first section, the theoretical foundation is presented, relations between identity and well-being are introduced, and Marcia's attempt to operationalize identity is explained and critiqued. In the second section, identity style (Berzonsky, 1989) as an alternative way to operationalize and examine identity is explained, and empirical studies that relate identity style to well-being are summarized. The third section addresses identity structure, the nature of which continues to be an important focus and question in the identity field. The literature review concludes with a summary followed by the research questions and hypotheses to be addressed.

Theoretical Foundation

As a psychoanalyst, Erikson, influenced by Freud, created his theory of identity development based on his psychoanalytic training and clinical work. He was concerned with identity and its relation to society on the basis of psychoanalytic theory at the time, and on the sociological formulations of his era. The "ego" was the individual center of organized experience and reasoned planning. Erikson assumed identity was a subsystem of ego and an outcome of ego's balancing work.

Erikson conceptualized an eight stage theory of biological, psychological and social development. Each stage of the life cycle is characterized by a stage-specific

developmental task which must be solved within it. The foundation for the solution is prepared in the previous stage and will be worked toward more in subsequent ones. He described each stage in the extreme “successful and unsuccessful” solutions. The desired outcome is a positive resolution between the two extremes. Among them, Erikson emphasized identity vs. identity diffusion in adolescence (Erikson’s fifth stage of development).

Mainly Erikson assumed that an individual has a conscious sense of who he or she is, but he or she works unconsciously to keep it stable and continuous across domain and time. The individual also has an ideal or a standard to adjust the function of ego’s work, because identity comes into formation through ego’s synthesizing. Together this serves one purpose, to keep one’s identity and the group’s ideal (i.e., what others think the individual should be) consistent. That is, the goal is to help the person to fit into society.

Identity contains the sense of self formed in childhood which is revised throughout life. It also contains the image ideal which is the goal that a person should strive for, but will never attain. Thus, identity formation is a lifelong process. Through identity formation, a person can find his or her place in society by acquiring the resources he or she needs, and feedback from social experience. This results through obtaining the ability to find, use and elaborate the resources, and by intellectually understanding the process of life. Thus, identity has three main tasks: to integrate, to interpret, and to guide. Identity will integrate an individual’s past and current experiences, and future expectations, and integrate the roles and expectations in different domains, such as career, family, relationships, and religion into a whole. Identity also helps individuals to interpret experiences in different periods of their lives, and in different aspects of life and

provides guidance for action so that the diverse and conflicting aspects of life can be assimilated into a singular, continuous life experience.

Identity and well-being. Erikson assumed that a healthy person masters the environment actively, demonstrates a unity of personality, and perceives self and society accurately. These abilities are related to the person's cognitive and social development. Formation of a healthy, stable identity is necessary for a person to be capable of general functioning, forming and managing intimate relationships, as well as adjusting to occupational demands.

Adolescence is a period when the individual finds himself/herself facing a challenge demanding his/her simultaneous commitment to physical intimacy, to occupational choice, to serious competition, and to psychosocial self-definition. The tension has the potential to cause many disturbances, such as problems of intimacy, diffusion of time perspective, diffusion of industry, and choice of negative identity. When adolescents are perplexed by the incapacity to take the roles compelled by society, they may choose to escape from normal life, school, and employment and become delinquent.

Erikson argued that adolescents who failed to form a stable identity might experience a range of difficulties including: problems in their relationships with their parents, intimacy problems, difficulty with the transition to being independent, or delinquency. In other words, individuals might have trouble in transitions and adaptation to new environments, working hard and successfully finishing school or work, performing daily activities, making friends and finding dating partners, maintaining stable relationships, or forming good relationships with family and communities.

Later, Arnett (1998, 2000), focusing on the transition from adolescence to adulthood, described the relationship between well-being and identity from a perspective similar to Erikson's. Exploration might result in disappointment, disillusionment, or rejection, or failure to achieve the desired career. He proposed that to become an adult means to become a self-sufficient person. The indicator of attaining adulthood is quality of character, which includes three criteria: "accepting one's self", "making independent decisions" and "becoming financially independent" (Arnett, 2000, p473).

Taken together, identity is assumed to be the definition of oneself an individual develops through his or her experience in context. Identity's functions are integration, interpretation and guidance. It integrates experiences along time and self across space (e.g., physiological growth, mental maturation, and social responsibility). Identity helps one to interpret various and conflicting information, and guides future action in different situations. Should an individual not succeed in the process of identity formation at the end of adolescence and experience prolonged identity diffusion, he or she is apt to encounter psychological problems. Therefore, identity is a very important concept for adolescent development. However, Erikson's theory does not lend itself easily to empirical research. Erikson provided a conceptual theory but it is difficult to measure the formation of identity, the formed identity or a person's feelings of continuity of self since Erikson did not expound on the indicators of them.

The identity status paradigm. To operationalize Erikson's theory for empirical testing, Marcia (1966) proposed the identity status approach. He posited that "As a psychological construct, identity is to be evaluated according to its usefulness in summarizing some behaviors and predicting others" (Marcia, 1994, p.79). Originally,

Marcia (1966) created a measure of identity in the form of a semistructured interview and an incomplete-sentence-blank. He borrowed the polar alternatives from Erikson's theory: identity achievement and identity diffusion. But, he stated that the "original dichotomy of Identity-Identity Diffusion (Confusion) did not capture adequately the variety of styles of identity resolution that our initial research participants described to us about themselves." (Marcia, 1994, p.72). Marcia established two new criteria: crisis and commitment. Identity achieved subjects were those who had experienced a crisis period and were committed to an occupation and ideology. In contrast, diffused subjects may or may not have experienced crisis, but they are not committed to anything. Later, Marcia changed these criteria into two orthogonal dimensions: exploration, and commitment. On the basis of these two dimensions, he formulated four identity statuses: identity achievement, moratorium, foreclosure, and diffusion (Marcia, 1966).

Identity achieved individuals have gone through significant exploration and have made commitments. They are capable of explaining the reasons for their choices and elucidating how choices were made. Moratorium individuals are in the exploring process, hence, their commitments are not strong, but they are struggling actively to make decisions on them. Foreclosed individuals have arrived at strong commitments without exploration. They have kept without questioning the values and directions of their childhood. Identity diffused individuals may have experienced some explorations but these explorations are random which may result in no commitment or implication for future reference. The hallmark is lack of commitment. They can hardly declare anything specific for their identity.

Marcia's identity status theory established the foundation for the empirical examination of identity. It was the most important operationaliation of identity for the 40 years since its publication in 1966. His paradigm provided the foundation for development of research on gender identity, ethnic identity, occupational identity, social identity, and religious identity, among others.

Some researchers reported discrepant findings for different domains in identity. For example, Goossens (2001) found that identity status was not consistent across domains, i.e. participants were achieved in some domains, diffused or foreclosed in others. In any given two specific domains (e.g., occupation, and politics), sixty to seventy percent of first-year students were in different statuses. Among them, 46% were found in two identity statuses, and 48% in three statuses. Moderate levels of conflict in statuses were found between global and domain specific identities. There were gender differences in specific domains but not in global identity. In other words, it is not possible to unite the findings of identity in different domains by simple summation.

Mainly, Marcia characterized identity achievement as commitment with exploration, and the hallmark of identity diffusion as a lack of commitment. Erikson emphasized the continuity and integration of identity establishment. Marcia believed that "if identity is self-constructed and achieved instead of bestowed by others, identity formation can be sequential throughout the life cycle and resolve the challenges one encounters." (Marcia, 1994, p.71). So the hallmark of identity achievement should be the ability to resolve challenges and integrate past and current experiences, and guide future behavior rather than simply commitment to an occupation or an ideology.

For Erikson, the commitment to a certain occupation or certain values may only be one of the indications of the identity crisis being resolved. Marcia views commitment as more or less permanent or fixed, and necessary for developmental maturity (Cote & Levine 1988). For Erikson, identity establishment is not the same as commitment. Identity is established when earlier childhood stages are bridged with later developmental stages— adulthood, or when one has the ability to maintain inner sameness and continuity and match it with the expectations of others and society. In other words, identity establishment refers to an individual being able to integrate his experience, to master the world by understanding himself, and to foresee a tangible future (Erikson, 1959). Based on an understanding of Erikson's theory, it can be argued that commitment is a dimension independent of identity. No matter whether an individual has formed a relatively stable identity, he can still make some commitment to a certain direction even though he may not really know why. He may experience some exploration and still decide to follow significant others' opinion.

Should an individual form an integrated identity, he still may not be happy or successful if commitment is used as the determinant. The example of Bernard Shaw given by Erikson (1959) illustrates this point. Even though Shaw worked very hard and had success in business in Ireland, he was unhappy because he was not fulfilled by his success and defined roles. When he finally decided to study and write, he moved toward fulfillment of his identity. He abandoned the old work without losing the working habit. The initial ritualization of his work life was extremely important for his later achievement. Here, the position in society he found for himself gave a direction for his commitment, and his commitment contributed to his success, but was not the sole

determinant. Shaw spent years to find his niche, learning to integrate his talent in writing with society, and ultimately formed his own identity during the process. His working habits had nothing to do with what he wanted to be, but promoted his ultimate identity achievement. (Erikson, 1968).

Similarly, Waterman (1992) adds feelings of personal expressiveness as a defining dimension of identity establishment. Identity-related activities that are consistent with one's potentials are always accompanied by intense involvement, and feelings of completeness or fulfillment. It also involves feelings of special fit or meshing with activity and impression of consistency with one's life purpose. Thus, an individual's process of searching for identity from an eudaimonistic perspective (people should recognize and live according to their "true selves") is the process needed to identify the potentials corresponding to the "true self." Waterman's views are consistent with the example of Bernard Shaw's ultimate discovery of his true identity. When discussing identity as the product of a co-construction of society and self, Waterman emphasizes the personal expressiveness of identity (i.e., focusing on "discovery" of who one truly is). This emphasis helps to explain the wide variation in how people define themselves. Waterman elucidates this limitation of the identity status paradigm relative to Erikson's theory. Among the few empirical studies conducted, it was found that personal expressiveness was positively related to values and success of self-realization (Waterman, 1993; Waterman, Schwartz, Goldbacher, Green, Miller & Philip, 2003).

In summary, the identity status paradigm provides a valuable concrete approach to examine the abstract concept of identity, but the approach fails to reveal some important aspects of identity, such as wholeness and continuity. Identity is a whole rather than a

simple summation of domains and identity establishment should be examined by assessing integration of domains. Identity's major characteristic is continuity of self rather than a static state. Continuity and adaptability can be demonstrated by identity styles, integration can be shown by identity structure, and well-being of young adults can serve as general indicators of identity establishment.

Identity Styles

The three identity styles derived by Berzonsky are the informational, normative and diffuse styles. Informational style refers to making decisions on the basis of the information being collected; normative style means making decisions on the basis of the expectations of significant others; and diffuse style indicates avoiding facing problems and not making decisions. During adolescence there may be more shifting across domains in terms of the style used. By adulthood, however, one's preference for a style tends to be relatively stable across domains and situations (Berzonsky, 1990). That is, even though most adults are capable of using any of the three styles, they will tend to use one style more than the others. The preferred style is also referred to as a dominant style of individuals. Empirical examinations of identity styles have focused extensively on female-only samples (e.g., Berzonsky, & Sullivan, 1992; Cheek, & Jones, 2001; Ferrari, 1991; Wheeler, Adams, & Keating, 2001) and samples comprised of primarily female subjects (e.g., Berzonsky, 1993, 1994). Thus, what is understood about young men's use of identity styles, and possible identity style differences according to gender is highly limited.

Theoretical origins of identity styles. Berzonsky interpreted Erikson's theory of identity as a self-generated theory about the self. Berzonsky employs self-theory because

it has the same functions and consists of the same elements as a scientific theory (Berzonsky, 1988). Schlenker (1985) indicates that personal theoretical beliefs and principles have the characteristics that they are believable, and personally beneficial. The utility of the personal beliefs are constrained by a person's reality (Berzonsky, 1988)

According to self theory, existing theoretical beliefs and principles provide a basic system for interpreting information and solving problems. New data are assimilated into the existing system. A theory also will develop new hypotheses, expectations and deductions about the world. The predictions are either confirmed or disconfirmed by the existential data. The disconfirmed data leads to accommodations or revisions to the theoretical system and generates new hypotheses and deductions. The process of testing, confirming or reconstructing of the system continues with no ending. Berzonsky proposed a feedback loop to represent the self-theory structure and restructure. The self-theory comprises cognitive schemata and scripted behavioral strategies for dealing with problems and experiences. To adapt, one has to evaluate the effectiveness and success of an approach with available information. If the strategy chosen to solve the problem is unsuccessful, one has to revise and modify certain aspects of self theory. Behavioral adjustment may occur with or without conscious awareness of cognitive work should the strategies not be successful. Berzonsky focused on the cognitive and behavioral components of the feedback loop in his development of identity processing style.

Berzonsky (1989) proposed that the four outcomes classified by Marcia's (1966) status paradigm were associated with differences in the process by which personal decisions are made and problems are solved. Identity foreclosure was found to be related to authoritarianism, rigid belief systems, and an intolerance of equivocality (Berzonsky,

1989). The self-exploring individuals, those in a state of moratorium or achievement, showed greater integrative complexity in social-cognitive reasoning than did individuals who were in a state of foreclosure or diffusion. Diffused and foreclosed individuals were biased in their focus and could not pay attention to relevant information and had trouble in integrating multiple and conflicting information (Berzonsky, 1989). Foreclosed subjects were found to be the least capable of analyzing and integrating information from multiple perspectives, and both foreclosed and diffused subjects refused to consider relevant information due to a restricted attentional focus. Moratorium and achieved individuals were found to process more extensive amounts of information and were more self-confident about their judgement than were foreclosed and diffused individuals (Read, Adams & Dobson, 1984). Berzonsky and Neimeyer (1988) also found that increased cognitive complexity is related to ongoing self-exploration. Thus, Berzonsky concluded that adolescents within different statuses may utilize different social-cognitive approaches to personal decision making and problem solving (Berzonsky, 1989).

Compared to identity status, identity style is considered more stable because style captures process, whereas status indicates an outcome which may be somewhat temporary. Longitudinal research has shown that individuals change from one status to another (e.g., from commitment to diffusion, from foreclosure to moratorium, or from diffusion to foreclosure) (Meeus, Iedema, Vollebergh, 1999; Waterman, 1999). On the other hand, identity styles are relatively stable. Identity style preferences are personally motivated (Berzonsky, 1990) and moderately or strongly related to personality and personality tends to be stable.

It should be pointed out that a person's identity is changing through time with the environment. Erikson indicated that the formation of identity is a lifelong process, and individuals form identity through different paths, but he did not describe the process. On the contrary, he described identity versus identity diffusion as the outcome of adolescents' crisis stage. However, it is hard to operationalize identity in a lifelong perspective. The focus on the process in terms of identity style represents the character of continuity very well. The identity of individuals may change but the process they use to form the identity is comparatively more stable than the actual way that they define themselves across time. From this perspective, identity style theory made important progress in the field of identity.

Measurement of identity style. The most widely used measurement of identity style is the Identity Style Inventory-III (ISI-III; Berzonsky & Sullivan, 1992). The participants rate on a 5 point Likert-type scale the extent to which they deem various items characterize them, from "not at all like me" to "very much like me." Examples of the items for the informational style include "I've spent a good deal of time reading and talking to others about religious issues" or "I've spent a great deal of time thinking seriously about what I should do with my life", for the normative style "I've always had purpose in my life; I was brought up to know what to strive for" or "I prefer to deal with situations where I can rely on social norms and standards", and for the diffuse style "Many times by not concerning myself with personal problems, they work themselves out" or "I'm not really thinking about my future now, it's still a long way off". Commitment items include "Regarding religious issues, I know basically what I believe and don't believe" or "I know what I want to do with my future". The ISI-III has 11 items

for informational style, 9 items for normative style, 10 items for diffuse/avoidant style, and 10 items for commitment. The ISI-III covers the domains of religion, politics, values, education and personal problems. An individual's identity style typically is determined by his or her highest standardized style score.

The ISI-III has provided a good beginning for empirical studies. The measure has relatively good test-retest reliability (ranging from .71 to .86) and moderate to high internal consistency (ranging from .50 to .79). Intersubscale correlations in a few studies showed relatively low correlations among the three styles.

The ISI-III separates commitment from the three styles as theorized by Berzonsky. As a result, it is possible for empirical research to examine the relationship between identity styles and commitment, and hence the mediating or moderating role of commitment. Questions in the identity style measure are not as domain specific as the status measure, and a number of the items measure the styles exclusive of domain.

The ISI-III, however, falls short of Berzonsky's theorizing and only captures process in a limited way. When comparing the questionnaires of identity status and identity style, it is easy to find that the two kinds of questionnaires are similar in content. The ISI-III includes content in the domains of: religion, politics, values, education, career, and personal problems. The status measures cover the domains of occupation, religion, politics, philosophical styles, family roles, sex roles, friendship and dating relationship. The measures overlap in terms of religion, occupation, and politics. Although measurement of identity style is not identical to measurement of identity status (Berzonsky, 1989; Berzonsky & Neimeyer, 1994), it may not capture the identity formation process as Berzonsky's theorizing suggests. Rather, it appears to report an

outcome of a past process which is not much different from the outcome that the status paradigm measures. For example, in the ISI-III, there are items like “ I’ve known since high school that I was going to college and what I was going to major in.” or “ Regarding religion, I’ve always known what I believe and don’t believe; I never really had any serious doubts.” These items are similar to those in measurement of Identity status. For example, “I’ve never questioned my religion. If it is right for my parents it must be right for me.”

In short, the ISI-III has relatively good test-retest reliability and moderately good internal reliability. However, this measure is limited in its capacity to capture process. The Current Identity Q-sort (CIQ, Kerpelman, Pittman, Lamke, & Sollie, 2005) offers a new alternative for measuring identity style since it was developed on the basis of Berzonksy’s theoretical perspective. Q-sort methodology is a research technique which identifies groupings of people according to their sorting of items. In the Q-sort process, respondents put items in an order (typically most like to least like) that best represents their attitudes or opinions, and arrange them based on given rules or positions. Q-sort can describe an individual’s attitude accurately because s/he decides the position of one item in accordance with his or her attitude about other items. On the other hand, Q-sorts still have the potential to limit one’s self description, because only a limited number of items can be put in each level according to the structure of the Q-sort map or array. The CIQ includes 60 items, 46 of which describe the three identity styles separate from domain. The items are derived from Berzonksy’s definitions directly, so they capture the theory quite well. Respondents may have one pure style or characteristics of several styles that most represent them. Experts including Berzonksy himself have rated items of each style

according to its definition, and a standard rating of each style was created (i.e., a criterion Q-sort for each style). Sorters' Q-sorts can be correlated with each of the criterion sorts. With this measurement approach, an individual's identity style can be examined more precisely and this helps to resolve some of the problems with the ISI-III measure.

Identity style and well-being. In addition to linking the identity styles perspective with the identity status paradigm, Berzonsky and other researchers also have tested how identity styles and well-being are related. Earlier, Erikson pointed out that identity is related to adolescents' well-being in areas such as: success in school and work, building relationships with others, and adaptation to environmental demands. Many aspects of well-being have been examined by researchers in relationship with identity styles. Several studies have focused on adjustment outcomes of different styles. Adams, Munro, Doherty-Poirer, Munro, Peterson, and Edwards (2001) studied the associations of identity styles with maladjustment of Canadian adolescents. Participants (N= 2001) ranged from 12 to 19 years of age, with an equal division of gender. They were multiethnic (51% Caucasians). It was found that diffuse/avoidant oriented adolescents were more likely to manifest conduct and hyperactivity disorders, whereas normative and information oriented adolescents were less likely to show problem behavior. Males were found to manifest more conduct disorders, but fewer males than females self-reported emotional disturbances.

In older adolescents, Ferrari, Wolfe, Wesley, Schoff and Beck (1995) focused on university students' academic procrastination. Participants (N=324) were first-year undergraduate students in three different colleges. The three colleges differed from each other on the average SAT total score and the percentage of persons who ranked in the top

fifth of their graduating high school class. It was found that a greater percentage of students at a nonselective college reported a diffuse/avoidant style than those attending the moderately or highly selective colleges. More students at the most highly selective college reported an informational style. Across colleges, diffuse/avoidant style was positively related to procrastination while informational style was negatively related to procrastination. Thus, regardless of context, students using an informational style were less likely to procrastinate than those using a diffuse style. However, the more highly selective college context contained a larger percentage of informational oriented adolescents and a lower percentage of diffuse oriented adolescents than the less selective college context.

In another college-age, all female, sample, procrastination was found to be associated with identity styles as well (Ferrari, 1991). Procrastinators were less information-oriented and more diffuse-oriented than nonprocrastinators. Normative style was not significantly related to procrastination. Ferrari (1991) also reported that individuals who employed a diffuse style had lower self-esteem, and greater social anxiety than individuals who used the other two styles. In a sample of 198 American and 109 Finnish college students, Nurmi, Berzonksy, Tammi, and Kinney (1997) found that informational style was positively related to self-esteem, stability of self, and success expectations, whereas diffuse style was negatively related to these well-being indicators and positively related to depression. Normative style was positively related to stability of self, and negatively related to depressive symptomatology. Gender comparisons were not examined.

Also using a college sample, Bersonsky and Kuk (2000) focused on the association between identity styles and adolescents' transition to university. Participants were 5000 undergraduate students with the average age of 18.15 years. The majority of the participants were Caucasian and two thirds of them were female. It was found that students using an informational style had high academic autonomy, and viewed themselves as having life-management skills to structure their lives and manage their time so that they could fulfill academic demands. They had the emotional autonomy to operate interpersonally in a self-directed manner without others' approval or support. Thus, they had mature interpersonal relationships. Those who scored high on informational and normative styles both had well defined educational and career objectives. Diffuse/avoidant style was negatively related to academic autonomy, educational involvement, and mature interpersonal relationships. Normative style was positively associated with academic autonomy, educational purpose and negatively related to mature interpersonal relationships. The findings indicate that diffuse/avoidant students may experience social problems and have difficulty establishing and maintaining a social support system. In addition, females were found to a higher level of educational purpose and use diffuse style less than males did.

Vleioras (2002) investigated the relationship between identity style and well-being with 251 Greek college students. More than two thirds of them were female. It was found that diffuse style was negatively related to all well-being subscales (self-acceptance, sense of autonomy, environmental mastery, personal growth, positive relations with others, and purpose in life). Informational style was found to be positively

related to all well-being subscales. Normative style was positively associated with environmental mastery.

In brief, studies concerning identity style and well-being are diverse. A general pattern was shown, however, that informational and normative styles are positively related to psychological well-being, whereas diffuse style is negatively related to these variables and also positively related to depression and anxiety. Across studies, gender differences in the relationship between style and well-being often have not been consistently examined.

Identity structure

Berzonsky's theory goes beyond identity style and identity process. After examining the research on self-theory, and identity status theory, Berzonsky assumed that identity includes "*process*, the means by which identity is encoded, elaborated, and integrated, as well as *structure*, the way identity is organized" (Berzonsky, 1988, p.256; italics added for emphasis). In other words, Berzonsky argues that we should study identity across process and structure. How one approaches the identity formation process (i.e., the cognitive strategies and skills used) will affect the nature of the identity that is formed. How individuals arrange different domains of identity according to importance, in part, determines the structure, and affects the identity formation process as well. For example, if vocational identity is important to an individual, then the formation of identity in this domain will have an effect on the overall identity as well. A clear and strong vocational identity also may promote the development of identity in other domains. Even if a person does not know about the political domain, he still can make politically related decisions according to his knowledge in vocation (e.g., is the

candidate's policies beneficial for his career?). The importance of different domains may change as situations change. The prominence of vocational identity may yield to ethnic identity when an individual travels in another country and is more aware of his ethnicity. Different individuals may have very different identity structures and can not be compared simply by domains. Thus, structure promotes the understanding of integration of different domains into a whole, that is, how an individual integrates his or her different identities. Structure is theorized by Berzonsky (1990, 2003a) to be related to identity styles. Informational style is related to a well-differentiated, hierarchically integrated structure; normative style is related to a rigid structure; and diffuse style is associated with a fragmented structure which is lacking overall integration, coherence and unity.

It can be assumed from Berzonsky's perspective and prior theorizing by Erikson, that identity in different domains can be united within the "structure" of identity (an overall organization of identity). People have different experiences and expectations in different aspects of life. Different domains have different influences on individuals according to where they are located within the identity structure. Using Berzonsky's idea of structure, the higher rank of a domain within the structure, the more influence it will exert on the individual and other identity domains.

Erikson proposed the concept of structure originally. Identity has three functions: to integrate, to interpret and to guide. Integration of experiences in different domains and situations, knowledge of self and society, is the basis of interpretation and guidance. Integration means to put information into an organization rather than a simple summation. The result of integration is identity structure.

Researchers have several different understandings of structure. Those who are oriented toward the identity status approach define identity itself as an intrapsychic organization of identity related roles, values, beliefs, and drives, and this organization is dynamic which will change with reflection from the environment (Marcia, 1980; Levine 2003; Kroger, 1997, 2003; Berzonksy, 2003b). Berzonksy (2003b) suggested that identity structure is an organization of information and knowledge and it affects an individual's interpretation of experiences. Marcia (1980) defined structure as how one organizes roles and values of identity, and Levine (2003) proposed that identity structure means the "organization of schema contents (i.e. their integration and differentiation)" and organization of changes across time and situations. In contrast, Kroger (2003) suggested that identity develops in a soft stage progression, and bring about a wholeness which is structured, hierarchically integrated, and universal. In other words identity structure can be inferred from identity status outcomes. Kunnen and Bosma (2003) implied that identity structure refers to an integration of person and context, which includes a subjective sum of personal identity and social identity. However, the nature of structure remains cloudy. It is not clear how identity-related roles, values, and beliefs differentiate and relate to each other in the dynamic organization.

In their recent work, van Hoof and Raaijmakers (2003) provides a more detailed description of structure. They define structure as evolving through personality and the ability to organize and demonstrate continuity along time and across space. The structural integration across situations can be illustrated at two levels: horizontal (interrelation between context-specific identities; e.g., the relations between work, family and recreation identities) and vertical (relations between core identity and context-specific

identities; e.g., the relation between overall identity and work, family and recreation identities). Horizontal integration reflects the relationships between personally revealing contexts (i.e., the extent to which they overlap with each other), and vertical integration shows the unique organization of different contexts in terms of how much they coincide with the general sense of who one is. This complex assessment indicates the complex organization of structure.

Researchers using a structural symbolic interactionism perspective also offer additional insights about identity structure (Serpe, 1987; Stryker, 1980; Stryker & Serpe, 1982). They also define structure as a hierarchically organized integration, but focus more directly on the role of salience. Hierarchy determines the possibility that any identity related behavior will be activated in a given situation, or across various situations. In other words, the more salient the specific identity, the more possible the specific identity-related behavior will occur in different situations. For example, when a mother thinks taking care of her children is highly salient, she might talk about children with most of her friends, as well as with her co-workers. Thus, identity structure is a hierarchical organization in which the salience of an identity determines its location (Stryker, 1980).

Identity structure has different functions from different perspectives. From the identity status approach, identity structure functions as a filter which affects what information is to be paid attention to, how it is interpreted, and evaluated, how it is integrated with other information and how one understands self and environment (Berzonsky, 2003b; Kroger, 1997, 2003; Levine 2003; Meijers, 1998). Stryker (1980),

using a symbolic interactionism perspective, advocated that structure can activate different behaviors in various situations.

Across these definitions, there is some overlap. They share some common conceptualization (i.e, identity structure refers to how an individual organizes identity elements into a whole). All would agree that elements in structure can be organized hierarchically according to the salience. Some even believe that within structure, elements interact with each other, some may supercede others, or justify inattention to other roles (Clarkson & Robey, 2000; Wiley, 1991; Vondracek, 2003). In spite of some overlap, as an abstract concept, no universal agreement has been reached on what structure is like and how it should be examined.

As a result, only a modest amount of research has been conducted on identity structure. From an identity status approach, identity structure can be inferred from the studies of status but has not been examined directly (Kroger, 2003). Often researchers talk about identity structure after they have examined identity status, or style. They believe the status or style reflects structure clearly. Berzonsky tends to confound style with structure (2003b), Kroger obscures status with structure (1997), and Kunnen and Bosma (2003) and Berzonsky, Macek and Nurmi (2003) propose commitment as the main indicator of structure.

From the Eriksonian-based tradition, scholars continue to debate the best means for examining structure empirically. Scholars from the symbolic interaction perspective offer some research-based insights about the nature of structure. Mainly identity salience was found to relate to behaviors and commitment (Adler, & Adler, 1987; Callero, 1985; Laverie, & Arnett, 2000; Lobel, & Clair, 1992; Serpe, 1987; Shih, Pittinsky, & Ambady,

1999; Stryker & Serpe, 1982). Stryker and Serpe (1982) examined individuals between the ages of 18 and 65 in regard to the religion role and the time they spent in religious activities. They found that identity salience was directly and positively related to commitment in that domain. Serpe (1987) studied 320 college freshmen (average age 18.5). The salience of five role identities were examined: academic, athletic/recreational extracurricular, nonorganizational friendship and dating roles. It also was found that identity salience was strongly related to commitment.

Laverie and Arnett (2000) examined the relationship between identity salience and effort with sports fans. It was found that when people had “sport fan” as a salient identity, their attendance at games was higher than others who did not have this salient identity. Callero (1985) examined the relationship between identity salience and effort in the perspective of blood donors. The participants had low to middle SES, with the average age of 33 years of age and were equally divided by gender. Those who had blood donor as salient identity were more likely to donate blood than others, viewed themselves as blood donors, expected others to see them as blood donors, evaluated others with regard to blood donation, and even had friendships based on it. In other words, people with certain salient identities, saw themselves, others, and relationships with others from the perspective of these identities, and spent more energy in activities that were identity relevant.

Shih, Pittinsky, & Ambady, (1999) also found in an Asian female sample that identity salience was related to effort and performance. Specifically they found that performance could be altered by changing the salience of an identity. When Asian ethnic identity was invoked and made salient to them, the sample performed better on a math

test, because Asians were believed to have good mathematic skills. Women, however, were believed to have inferior skills in math than men. When gender identity was activated, the sample performed worse on a math test. Also focusing on identity and performance, Adler and Adler (1987) examined the association between identity salience and performance with college athletes. Participants were basketball players (70% African American). Those who had a salient academic identity received better grades than those who had a salient athletic identity. Finally, Lobel and Clair, (1992) found a positive relation between effort, performance and identity salience in the domains of family and career. Individuals with salient career identities wanted to expend more effort at work and perform better in their careers than did those with salient family identities.

Measurement of identity structure. In Eriksonian-based studies where structure was discussed, often a hierarchical arrangement was assumed (Berzonsky, 1990; Kroger, 1997; Schwartz, 2001). In contrast, the majority of researchers who have made some effort to investigate structure from a symbolic interaction perspective have attempted to measure structure directly, i.e., individuals are asked to rank identities in the order of importance to them so that they are conscious of the structure in their minds (van Hoof, & Raaijmakers 2002). Serpe (1987) proposed to measure identity salience with scale-comparison scaling. Subjects were asked to choose one identity over another when answering how they thought of themselves. All possible pairs of five roles (academic, athletic/recreational, extracurricular, nonorganizational friendship and dating roles) were provided. This method forced subjects to be conscious of their structure.

Some researchers suggested measuring structure indirectly through indicators, such as behaviors in situations. According to Stryker, the location of identity in the

hierarchy structure indicates the likelihood of a behavior being demanded by the identity in situations. In other words, the higher an identity locates in the hierarchy, the more likely that behaviors related to the identity will be invoked across situations. If an individual puts career in the highest rank, he or she might think of work while shopping, spend more weekend time engaged in work activities, and talk about work at dinner time. Thus, Stryker and Serpe (1982) proposed measuring the identity salience structure using two items in four roles (work, spouse, parent, religion): how do people want to introduce themselves when meeting people for the first time and how do people choose to spend a weekend. Subjects were given the choices of work, with spouse, with children, religious activity, or other. The higher the ranking, the higher is the salience of a role. McQuillen, Licht, and Licht (2001) and Ogilvie (1988) measured the time individuals spend in each domain of identity. Relative time spent indicated the hierarchical identity structure. This method may demonstrate the salience of identity in certain domains at an unconscious level.

Some researchers proposed to study indirectly the structural relationship of identity in different domains or situations with the help of a checklist of descriptions. Using these methods a more complex relation among self-description may be revealed rather than a simple hierarchical or equal level of importance. This method illustrates structure on the basis of unconscious personal revealingness rather than the conscious importance of certain identities. Reich (2000) asked individuals to select items from an adjective checklist of identity descriptions. The relationship between core self and role identity were derived by examining the correlations of adjectives in the checklist.

Van Hoof and Raaijmakers (2002) adopted a similar process to study structure integration among identities in work, school, home, and recreation. She suggested measuring context specific identities and core identity with adjectives. The relation between the adjectives reflected relations between identities in different contexts. She derived 4 dimensions of adjectives from the identity status interview: inhibition, interpersonal behavior, feelings, and competence. Inhibition refers to self doubt which hinders progress. Interpersonal behavior refers to how an individual acts toward the social environment. Feeling refers to how individuals feel when they are in contexts, and competence means the qualification of behavior. The personally revealing contexts refer to the institutionalized contexts in which individuals can participate such as school, work and leisure. The two samples of van Hoof's study were adolescents with average age 13.6 (early adolescents) and 17.9 (middle adolescents). Subjects were asked to choose four out of seven contexts provided: school, home, leisure time, work, religion, politics and own home (not staying with parents). One third chose only three even though they were told to choose four. Older adolescents were able to choose more contexts than younger ones because older adolescents had more chances to be involved in new contexts. If adolescents chose the most popular contexts such as leisure, home and school, they tended to have higher integration.

In conclusion, no universal definition of structure can be found in the current literature, and identity structure is understood differently from different perspectives, and is believed to serve different functions and have different indicators. However, a common theme is shared: structure is the organization of identity elements, and these elements are

organized into a whole. Thus, structure has at least two main aspects: hierarchy and integration.

Identity structure and well-being. Eriksonian-based researchers are still arguing about the basic concept and measurement of structure. Structure is always implied from measurement of identity status or identity styles rather than directly studied. Therefore very few studies have been conducted on the relationship between identity structure and well-being except those that relate identity status and style to well-being. Among the few studies that have concerned identity salience, performance in salient domains was emphasized (Adler, & Adler, 1987; Lobel, & Clair, 1992; Shih, Pittinsky, & Ambady, 1999). Some literature on the conflict of family and work roles, however, can lend some support. For example, Wiley (1991) noted a relationship between stress and salient identities among individuals with conflicting salient identities. The sample was comprised of married men and women who were employed outside the home. People with work and family identities of equal salience tended to have higher stress than those who had them at different salience levels when both family and work required their intensive commitments. A number of other researchers have noted variation in well-being (e.g., depression, anxiety, role strain) among men and women according to the identity salience of and commitments to work, marital and parental roles (e.g., Greenberger & O'neil, 1993; Greenhaus & Parasuraman, 2002; Simon, 1992).

There is only one study that explored the relationship between identity integration and well-being. van Hoof, and Raaijmakers (2002) studied early adolescents and middle adolescents. They found that identity integration was curvilinearly related to well-being in the inverted U-shape. Horizontal and vertical integration were found to be closely

related to each other and both were used in the assessment of the relation between structure and well-being. Well-being was measured by how well individuals feel emotionally. Middle adolescents had lower well-being than early adolescents because middle adolescents had more contexts to integrate, and more life choices to address than early adolescents did. Under certain limits, the level of integration of identity (both horizontal and vertical) was positively related to well-being, but too low or high integration appeared risky for adolescents' development (van Hoof, & Raaijmakers, 2002).

In short, there is very limited research that specifically addresses on the relationship between identity structure and well-being. In fact, the research on structure is still at an early stage and most researchers are still arguing about the basic concept of structure and its measurement. This paper may provide some information for the further examination of structure.

Summary

Identity styles are useful for identifying the stability of characteristics of individuals relevant to the ongoing construction and revision of identity throughout the life cycle. Erikson assumed that identity formation is a life long process. It is hard to conceptualize or measure such a process using Marcia's paradigm. The identity style approach assists with solving this dilemma by focusing directly on the process. Furthermore, identity style captures the continuity of the process through its relationship with personality, a more stable factor than status. In addition, focusing more explicitly on structure helps researchers to understand the organization of identity across the different domains.

Identity establishment and identity diffusion were emphasized by Erikson as the outcome extremes of identity formation. Preference of a specific style may signify the likelihood of reaching one identity outcome, but more clarity is needed in terms of how one style results in specific identity outcomes or establishment over time. Identity structure, on the other hand, can be viewed as an indicator of identity outcome because it demonstrates how identity is organized and composed. Thus, the relation between identity style and structure will further elucidate what is understood about of identity formation.

Berzonsky assumed structure and specific domains are related to identity styles (Berzonsky, 1990), however, the interaction is not clear. There is only one study (Berzonsky, Macek, & Nurmi, 2003) that dealt with the structure of identity and related it to process. But, the study focused on the stability of structure rather than the structure itself.

Erikson assumed identity formation related to individuals' well-being, personality and cognitive development. He viewed individuals who ended up as identity diffused as having some psychological problems. Research employing the identity styles demonstrates this relationship by showing the diffuse/avoidant style is related to adjustment in terms of low autonomy, inefficient personal relationships, failure in school and work, maladaptation to environment, lack of purpose in life, low self esteem, great social anxiety, high depression, whereas informational style is positively related to adjustment in these areas, and normative style is associated with high environmental mastery, and stable self conceptions. Few studies demonstrate the relationship between

identity structure and well-being. Identity salience was found to be related to performance and stress in a salient domain. And integration was found to relate to well-being curvilinearly. Furthermore, no study has examined the interaction of structure and style in the relation to well-being.

Research Questions and Hypotheses

1. How does identity style relate to the hierarchy of the identity structure?

Specifically, (a) what is the relationship between the global identity style and the styles used for identities at different levels of the hierarchy; and (b) how does global identity style relate to the salience of the domains within the structure? Berzonsky assumed that most adults can use all three styles, but they form their preferences in daily life, and ultimately use one style more than the other two. However, Goossens and others have found variability in status across domains which may imply variation in the style used.

2. What is the relation between the identity style and identity structure integration? It is hypothesized that the informational and normative styles will be related to an integrated structure, and the diffuse style will be related to a fragmented structure (i.e., low integration) (Berzonsky, 2003; Berzonsky, Macek, & Nurmi, 2003).

3. How do identity style and identity structure relate to indicators of young adult well-being (i.e., adaptation in terms of autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life, and self acceptance)?

a) What are the associations between identity style and well-being? It is hypothesized that the stronger a person's informational style the more positive his or her well-being, the stronger a person's diffuse style the more negative his or her well-being, the stronger

a person's normative style the stronger his or her sense of environmental mastery (Vleioras, 2002).

b) Does consistency of styles used across domains, as well as domain salience relate to well-being? Past work does not address whether salience of particular domains are associated differentially with well-being, nor does it address whether consistency of a particular style matters for well-being or whether it is consistency itself (regardless of the style) that matters for well-being. Analyses will examine how these two aspects of the identity structure hierarchy are related to indicators of young adult well-being.

(c) What are the relations between identity structure integration and well-being? It is predicted that integration will be positively related to well-being, however, this relation may be curvilinear (van Hoof, 1997; van Hoof & Raajmakers, 2002).

(d) Are identity style and identity structure additive in their explanation of variance in young adults' well-being; does identity structure, in terms of high versus low integration, moderate relations between style and well-being? It is anticipated that when integration is higher, the relationship between identity style and well-being will be stronger, where the association between normative and informational style with well-being will be positive and the association between diffuse style and well-being will be negative.

METHODS

Participants

Undergraduate students at a southern, land grant university, between the ages of 18 and 25 (inclusive) were recruited for the current study. Among 604 returned questionnaires, 480 were usable. Demographic information such as age, ethnicity, major, gender, dating and marital status were collected. Students from more than 50 majors participated in the study. The mean of age was 20.22 (SD = 1.43). Among the participants, 11.9% were freshmen, 33.5% were sophomores, 23.5% were juniors, 29.2% were seniors, and 1.9% were in their fifth year. One hundred and eighty five participants were male (38.5%) and 295 were female (61.5%). In the sample, there were 88.3% Caucasian, 7.1% African American, 2.3% Asian, 1.0% Latinos/Hispanic, 0.6% Native American and 0.7% mixed ethnicity participants. All of the participants were single (never married) and half of them were in dating relationships (50.4%). The majority of participants were from middle class families. Among the mothers of participants, 1.7% had less than 12 years education, 12.7% had completed high school only, 16.4% had some college or technical certificates, 32% held bachelor degrees, 37.2% had education beyond the bachelor level. Among the fathers of participants, 1.1% had less than 12 years education, 15.6% had completed high school only, 11.4% had some college or technical certificates, 34.9% held bachelor degrees, 28.1% had education beyond the bachelor level.

Measures

Global identity style. Participants' global identity style was measured using the Current Identity Q-sort (CIQ, Kerpelman, Pittman, Lamke, & Sollie, 2005). The sort contains 60 items covering the three styles and their correlates. The 60 items are sorted into 9 columns. Card distributions from column 1 to 9 are 4, 5, 6, 8, 14, 8, 6, 5, 4. Column one contains cards least like the sorter, and column nine contains cards most like the sorter. Twelve identity experts sorted the cards according to the definition of three identity styles (see appendix A-2 for the CIQ items and style definitions) which yielded three criterion sorts (i.e. one for each style). The criterion sorts represent the exemplar informational, diffuse and normative styles. The extent to which a participant was using each of the styles was determined by correlating his or her sort with each of the three criterion sorts (each participant received three scores). The larger the positive correlation with a criterion sort, the more the sorter uses that style. Test-retest reliability of the CIQ is .71 (Kerpelman, et al. 2005). The informational style criterion sort is negatively correlated with normative style criterion sort (-.35), and negatively correlated with diffuse style criterion sort (-.89); the normative style criterion sort is not significantly correlated with diffuse style criterion sort (Kerpelman, et al. 2005). These associations indicate that informational and diffuse styles may be polar opposites of a linear scale, and there are two dimensions of identity style rather than three.

The Identity Styles Inventory (ISI-III, Berzonsky, 1992, see Appendix A-3) was used to assess the validity of CIQ for the current sample. Past work indicates that the correlation between the ISI and CIQ was .48 for the informational style, .51 for the normative style, .36 for the diffuse style (Kerpelman, Pittman, & Li, 2004). In the current

study, the correlation between the ISI and the CIQ was .40, .53, and .47 for the informational style, normative style and diffuse style, respectively.

Identity structure: Consistency of style used across domains. Styles used in each domain (i.e., different identity areas) were assessed with a measure created on the basis of the ISI-III (see Appendix A-4). Items on each subscale were summarized to capture the main characteristic of each style. Informational style was assessed by “In this area, I would like to have as much information as possible and spend a lot of time thinking about it”. Normative style was assessed by “I prefer to deal with situations on the advice of significant others (parents, relatives, spouse, religious leaders) in this area”. Diffuse style was measured by “When I have to make decisions in this area, I wait for them to work out by themselves and don’t give them much thought”. Subjects were asked for each domain to rate how each style fits them on a five point Likert-type scale, ranging from not at all (1) to totally (5). Seven domains based on those used in identity status research were addressed in the current study: family, dating relationship, religious beliefs, politics, major in college/future career, recreation/leisure interests, and friends.

Cluster analysis was conducted on the basis of the degree that each style was used in each domain. The sample was divided into two halves randomly, and the cluster analysis was conducted for each half and then again using the whole sample. Few significant changes were found between the clusters for each half of the sample or between each half and the cluster for the whole sample (see Appendix B-2). The clustering for the total sample was used in subsequent analyses. Eight clusters in each of the seven domains were generated which included all possible combinations: dominant informational style, dominant normative style, dominant diffuse style, dominant

informational and normative style, dominant normative and diffuse, dominant informational and diffuse style, no dominant style and all styles used. The starting center for the dominant style(s) was 4, and the non-dominant style(s) was 1.5 (see appendix B-1). The analyses resulted in some shifts in the centers after the clustering. For example, for dominant informational style, the mean of the center of informational style was 4.13, ranging from 3.27 to 4.64 across domains; the mean of the center of normative style was 4.55, ranging from 1.49 to 2.80; the mean of the center of diffuse style was 1.45, ranging from 1.32 to 1.55. For detailed information, see Appendix B-2.

The distance from the cluster centers ranged from .43 to 2.40. The standard deviation of distances varied from .92 to 1.04 across the seven domains (see Appendix B-3). Under conditions of perfect match, the mean consistency across the eight types ranged from .23 to 2.53, overly restricting the assessment of consistency of style, therefore assessment of consistency was calculated by counting the times the participants fell into the same or related groups in each domain. For example, the consistency of informational style was determined by the frequency a participant fell into the groups of dominant informational style, dominant informational and normative style, dominant informational and diffuse style or all dominant styles because the participants used a dominant informational style if they fell into any of these groups. The consistencies of normative and diffuse styles were calculated the same way. Consequently, the range of consistency of each style used across domains was between 0 and 7. The mean consistency for the informational, normative and diffuse style was 5.47, 4.70 and 2.66 respectively.

The consistency of informational style was positively related to the consistency of normative style ($r=.16$, $p < .01$); and negatively related to the consistency of diffuse style

($r = -.33, p < .01$). The consistency of the normative style was negatively associated with the consistency of diffuse style ($r = -.16, p < .01$).

Identity structure: Domain salience within the hierarchy. The salience of each domain was assessed using procedures adopted from Stryker and Serpe (1982) (see Appendix A-5). Participants were asked to rank the seven identity domains (ranging from 1 most reflective to 7 least reflective) in terms of how well the domains reflected who they were (i.e., salience).

Other previously used measures of hierarchy were compared to the one used in the current study (Serpe, 1987; van Hoof, 1997). Participants were asked which domain they would discuss first when meeting a new person. They also were asked to indicate how meaningful each domain was to them, ranging from 1 not at all meaningful to 5 very meaningful. The distance between each level and those that were at the same level were determined by the rating of how meaningful each domain is to the person. Finally, participants were also asked to choose a significant domain in pair wise comparisons. Almost all correlations among the different methods used to assess hierarchy were significant at $p < .01$, suggesting that the measure used in the current study was a valid indicator of salience (see Appendix B-4).

Identity structure: Integration. The integration of the identity structure was assessed using procedures adopted from van Hoof (1997) (see Appendix A-6). Structural integration refers to how, and to what degree, individuals put identities in different contexts or domains together (i.e., spatial integration). Spatial integration includes two layers: horizontal and vertical integration. The correlation among domains demonstrates

the horizontal relationship, and correlation between core identity (i.e., how one defines oneself overall) and each of the domains demonstrates the vertical relationship.

In van Hoof's study, the majority of subjects selected contexts such as home, school, leisure, and work. The current study aimed to increase variability by increasing the number of domains. Domains were drawn from the status approach: occupation, religion, politics, friendship, dating, recreation, and family domains (Berzonsky, 2003; Kroger, 1997; Kroger, 2003; Lavoie, 1994; Reich, 2000; Schwartz, 2001; Vondracek, 1996).

To address the correlations between identities in different contexts, van Hoof (1997) adopted adjectives from four dimensions derived from the status interviews: inhibition (self-doubt with inhibiting effects), interpersonal behavior (actions and behavior toward the social environment), feeling and competence (capability). These adjectives describe the identity indirectly with the concepts related to identity such as self-esteem, and cognitive abilities.

For the current study, a checklist was extracted from the Personally Expressive Activities Questionnaire (PEAQ, Waterman, 1998, see Appendix A-6). PEAQ assesses the feelings related to the identity and measures identity in a more direct way than the four dimensions in van Hoof's measurement. The PEAQ contains 6 items: (a) this activity gives me the greatest feeling of really being alive. (b) When I engage in this activity I feel more intensely involved than I do when engaged in most other activities. (c) This activity gives me my strongest feeling that this is who I really am. (d) When engaged in this activity I feel this is what I was meant to do. (e) I feel more complete or fulfilled when engaging in this activity than I do when engaged in most other activities.

(f) I feel a special fit or meshing when engaged in this activity. The questions asked for each domain in the current study were: What do you feel when you engage in activities in this area? (a) I feel really alive (b) I feel intensely involved (c) I feel that I am really being myself (d) I feel like I'm doing what I was meant to do (e) I feel complete or fulfilled (f) I feel like things really come together; they fit. Subjects were asked to rate in each domain how true each item was for them on a 5 point Likert-type scale.

Integration for each individual was originally planned to be calculated with the correlation average across all inter-correlated domains using the procedure of van Hoof and Raaijmakers (2002). However, the reliability of the personal expressiveness items was very high across domains, averaging approximately .90. Calculation of correlations was not possible because many standard deviations were zero when the items were scored the same. The average of absolute differences among items across domains was adopted, instead. For each individual, the ratings of personal expressiveness in each domain had subtracted from it the corresponding ratings in other domains. The differences among them were changed into absolute values and then the mean was calculated. For example, one subject rated 5, 3, 5, 3, 3, and 3 on personal expressiveness at the general or core level, and 4, 5, 5, 4, 4, and 4 on personal expressiveness in the family domain. The differences between the two levels were 1, -2, 0, -1, -1, and -1. The mean of the absolute value of the differences was $(1+2+0+1+1+1)/6=1$. Therefore, the bigger the difference, the lower the integration was. Vertical integration was calculated by the differences between personal expressiveness in general and personal expressiveness in each domain. The mean of the absolute values of 42 differences made up the vertical integration of an individual. Horizontal integration was calculated by the

differences among 7 domains. The mean was derived from absolute the values of 126 (6 X C_7^2) differences. Vertical integration and horizontal integration were highly correlated ($r=.76$, $p<.01$) suggesting the need to use only one measure of integration. van Hoof and Raaijmakers (2002) found that the older adolescents in their sample integrated their identities in different contexts better vertically than horizontally. Therefore vertical integration was selected for the current study.

Well-being. Well-being was measured using the *Scales of Psychological Well-Being* (PWB, Ryff, 1989 see Appendix A-7). Vleioras (2002) demonstrated the utility of the PWB with Greek college students. This measure includes 84 items and covers 6 aspects (14 items for each): self-acceptance, sense of autonomy, environmental mastery, personal growth, positively relations with others, and purpose in life. Self-acceptance is characterized by positive attitude toward oneself, acknowledgement and acceptance of multiple aspects of self including good and bad qualities, for example “*I like most aspects of my personality*”. Autonomy is illustrated by self-determination, independence, and the ability to resist social pressures to think and act in certain ways, for example “*I tend to be influenced by people with strong opinions*” (reverse coded). Environmental mastery is described by competence in managing the environment and control of a complex array of external activities, for example “*I am quite good at managing the many responsibilities of my daily life*”. Personal growth is characterized by feelings of continued development and seeing self as growing and expanding, for example “*For me, life has been a continuous process of learning, changing, and growth*”. Positive relations with others include warm, satisfying, trusting relationships with others and concern about the welfare of others, for example “*People would describe me as a giving person, willing to share my*

time with others". Purpose in life is characterized by goals in life and sense of directedness, for example "*I enjoy making plans for the future and working to make them a reality*". Participants respond on a six-point scale ranging from (1) strongly disagree to (6) strongly agree. The internal consistency of each subscale varies from .83 to .91 (Ryff, 1989). The internal consistency in the study conducted by Vleioras (2002) yielded reliability scores between .77 to .86. The internal consistency for the current study ranged from .82 to .90.

Procedure

Students were recruited from participating Auburn University classes in the departments of Human Development and Family Studies, Political Science, Physics, Civil Engineering, Aviation Management/Logistics, Marketing, and English. After the students reviewed the information letter, those who were interested in participating were given a survey packet to complete outside of class. Instructions on how to complete the measures were provided orally and in writing. Participants were asked to bring the completed survey back to the classroom one week after distribution. They were provided an envelope in which to return their surveys. One week later, the researcher was present in class to collect the surveys. Students received extra credit or were entered into a drawing for one of 3 \$50 awards, if extra credit was not available, for their participation in the study.

RESULTS

The main goals of the current study were to explore associations between identity style and identity structure, and associations between these two dimensions of identity and young adult well-being. First descriptive statistics and gender comparisons were examined for identity structure, identity style and well-being. Next, each of the study questions/hypotheses was addressed. Although gender has not been examined in past research with regard to identity structure and only minimally with regard to identity style (e.g., Berzonsky, 1992; Berzonsky & Kuk, 2000), gender has been found to be an important factor in predicting well-being among adolescents and young adults (e.g., Bergman, & Scott, 2001; Ryff, 1989; Slicker, & Thornberry, 2002), and therefore, gender was examined as a potential moderator of the relations between identity style, identity structure, and well-being.

Preliminary Analyses: Descriptive Statistics and Gender Comparisons

Global identity style. Each participant's sort was correlated with each of the three criterion sorts, reflecting the overall degree that each style was used. One way within-subjects ANOVA was conducted to examine differences among the participants' correlations with three criterion sorts. Across participants, the mean correlation was .33 (SD = .20; range = -.53 to .74), .13 (SD = .20; range = -.49 to .61), -.33 (SD = .20; range = -.71 to .58) for the informational, normative, and diffuse criterions, respectively. The results for ANOVA indicated a significant difference in using three

styles, Wilks' Lambda = .22, $F(2,478)=846.88$, $p=.00$, multivariate $\eta^2 = .78$. Follow up polynomial contrasts indicated that more participants used informational style than normative and diffuse style, fewer participants used normative style than informational style and more used normative style than diffuse style. Seventy percent of the participants' sorts were significantly and positively correlated with the informational style criterion (1% were negatively correlated with it); 30% of the participants' sorts were significantly and positively associated with the normative style criterion (4% were negatively correlated with it); 1.5% of the participants' sorts were significantly and positively correlated with the diffuse style criterion (70% were negatively correlated with it); and 15.6% of the participants' sorts were significantly associated with both informational and normative criterions. The informational style was negatively correlated with the normative style ($r=-.38$, $p<.01$) and negatively correlated with the diffuse style ($r=-.92$, $p<.01$). The large negative correlation for the informational-diffuse style association indicates that the CIQ measures these constructs as virtually polar opposites. The normative style was not related to the diffuse style ($r=.06$, $p=.23$).

When gender was taken into consideration, multivariate analysis of variance (MANOVA) ($F(3, 476)=5.25$, $p=.001$, Wilks' Lambda=.97) indicated that females used a global informational style significantly more (partial $\eta^2 = .01$), and the diffuse style significantly less, than males did (partial $\eta^2 = .01$). No gender differences were found for the global normative style (see Table 1).

Table 1

Gender Differences for Identity Styles

	Male		Female	
	Mean	SD	Mean	SD
Informational Style	.30	.22	.35*	.19
Normative Style	.11	.22	.14	.19
Diffuse Style	-.30	.21	-.35*	.19

* $p < .05$; $n = 480$.

Consistency of using each style. One way Repeated Analysis of Variance (ANOVA) showed there were significant differences in the consistency of using the three styles (Wilks' Lambda = .45 $F(2, 478) = 290.55$, $p < .01$). Follow up polynomial contrasts indicated that individuals had higher consistency in using the informational style than the normative and diffuse style, and lower consistency in using the diffuse style than the normative style. Gender differences also were found in the consistency of using the three styles with the employment of MANOVA ($F(3, 476) = 5.19$, $p = .002$, Wilks' Lambda = .97). The consistency of using the informational and normative styles was significantly higher for females than for males (partial $\eta^2 = .01$; partial $\eta^2 = .02$). Males used the diffuse style more consistently than did females (partial $\eta^2 = .02$) (see Table 2).

Table 2

Consistency of Using Each Style across Domains

	Informational Style			Normative Style			Diffuse Style		
	total	male	female	total	male	female	total	male	female
Mean	5.47	5.28	5.59*	4.70	4.43	4.87**	2.66	2.93	2.49**
SD	1.47	1.61	1.36	1.65	1.72	1.58	1.66	1.75	1.58

* $p < .05$, ** $p < .01$

Identity domain salience. One way ANOVA was conducted to compare the salience of each identity domain. It was found that the family domain was the most important, and major/future career was the second most important domain. The political

beliefs domain was rated as the least important. Gender differences were found in the domains of family, political beliefs, major/future career and recreation. Females rated family and major/future career as more important than males did. Males rated political beliefs and recreation as more important than females did (see Table 3; for a breakdown of the percentage of males and females within each domain at each level of the hierarchy see Appendix B-5). For interpretation, the salience score was recoded so that smaller numbers represent lower salience and larger numbers represent higher salience in subsequent analyses.

Table 3

Identity Structure: Salience of Each Domain

	Family			Friends			Dating Partner			Religious Beliefs		
	total	male	female	total	male	female	total	male	female	total	male	female
Mean	5.47	5.03	5.74*	4.28	4.19	4.35	3.74	3.64	3.80	3.73	3.64	3.78
SD	1.38	1.43	1.28	1.46	1.53	1.42	1.89	1.92	1.86	2.04	2.05	2.04

	Political Beliefs			Major/Future Career			Recreation		
	total	male	female	total	male	female	total	male	female
Mean	1.74	1.99	1.58*	4.83	4.59	5.00	4.19	4.90	3.75*
SD	1.19	1.29	1.10	1.72	1.83	1.63	1.92	2.07	1.67

* $p < .01$ (given the number of correlation tests, a more conservative significance criteria was used).

Integration. The mean for integration was 5.59, ranging from 0 (high integration) to 12.57 (low integration) ($SD=2.22$). For the ease of interpretation, the integration variable was recoded so that higher numbers indicate higher integration in later analyses. No gender difference was found ($t(478) = .10, p = .92$).

Well-being. The subscales of well-being were significantly correlated with each other, ranging from .30 to .75 (see Table 4). The means of the subscales of well-being ranged from 4.35 and 4.85. Significant gender differences were found using MANOVA ($F(6,473)=14.95, p < .01, Wilks' \Lambda = .84$) for three of the subscales (personal growth, positive relations with others, and purpose in life). Females scored higher on these

subscales than males did (partial $\eta^2 = .06$ for all three) (see Table 5). Discriminant analysis was conducted as follow up test, but yielded in the same findings.

Table 4

Correlations among Subscales of Well-being

	1	2	3	4	5	6
1. Autonomy	-	.47*	.41*	.30*	.36*	.48*
2. Environmental mastery		-	.46*	.57*	.71*	.75*
3. Personal growth			-	.53*	.56*	.51*
4. Positive relations with others				-	.60*	.63*
5. Purpose in life					-	.73*
6. Self-acceptance						-

* $p < .01$ (given the number of correlation tests, a more conservative significance criteria was used)

Table 5

Means and Standard Deviations of the Well-being Subscales

	Autonomy			Environmental Mastery			Personal Growth		
	total	male	female	total	male	female	total	male	female
Mean	4.35	4.40	4.31	4.35	4.29	4.40	4.78	4.58	4.91*
SD	.70	.69	.71	.69	.74	.66	.63	.68	.56
	Pos. Rel. with Others			Purpose in Life			Self-acceptance		
	total	male	female	total	male	female	total	male	female
Mean	4.85	4.61	5.01*	4.82	4.59	4.96*	4.61	4.51	4.67
SD	.77	.76	.74	.71	.78	.62	.83	.78	.80

* $p < .01$ (given the number of correlation tests, a more conservative significance criteria was used)

Results for the Study Questions and Hypotheses

The first set of questions addressed associations between global identity style and identity structure hierarchy (consistency and salience). To test the relationship between the strength of global identity style and consistency of style used across domains (Question 1 a), 2-tailed correlations between each of the global style variables and the consistency scores (based on the cluster analysis) were examined. A significant relationship between the global style and the consistency of the corresponding style across domains was found (see Table 6).

Table 6

Correlations between Global Style and Consistency of Style Used across Domains

Consistency of Style Used in Cluster Analysis	Global Informational Style			Global Normative Style			Global Diffuse Style		
	total	male	female	total	male	female	total	male	female
Informational Style	.29*	.34*	.23*	-.03	-.08	.02	-.29*	-.30*	-.26*
Normative Style	-.07	.03	-.15*	.33*	.17	.45*	-.05	-.07	-.01
Diffuse Style	-.37*	-.37*	-.34*	-.01	-.03	.00	.38*	.39*	.36*

* $p < .01$ (given the number of correlation tests, a more conservative significance criteria was used)

Correlations between global identity styles and styles used in different levels of hierarchy regardless of the domain content as well as styles used in different domains regardless of the hierarchy were examined. The global informational style measured with the CIQ was significantly related to the consistency of informational style used across domains. A similar pattern was found for the normative and diffuse styles. When the style used across the hierarchy of salience, regardless of domain, was examined (see Table 7), the overall pattern also supported positive associations between global identity style and style used in domains across the hierarchy. The correlations are not large which suggest that there is variation in terms of what style is used within a domain. The negative relations between informational style and diffuse style across the hierarchy reflected their bipolar nature as assessed with CIQ.

$$Z\text{-tests } \sigma_{Z_1-Z_2} = \sqrt{\frac{1}{N_1-3} + \frac{1}{N_2-3}}; Z = \frac{(Z_1 - Z_2) - 0}{\sigma_{Z_1-Z_2}} \text{ (Blalock, 1960) were used}$$

to examine differences between the correlations for males and females. It was found that females had a stronger correlation between the global normative style and the consistency of the normative style used across domains than males did ($z=3.31$). Thus, when

normative style was used globally, females tended to use the normative style more consistently than did males. Gender differences did not emerge for the other two global identity styles and their corresponding consistency scores.

The salience of each domain was determined by participants' rankings of how each domain reflected who they were (Question 1b). Global informational style was associated positively with the salience of the major/future career domain and negatively with the salience of the friendship domain; diffuse style showed the opposite pattern with the salience of friendship and also showed a positive association with the recreation domain and a negative association with the religious beliefs domain, but did not show a significant relationship with the salience of major/future career. Normative style was associated positively with the salience of the family and religious beliefs domains, and negatively with the salience of the political beliefs, major/future career and recreation domains (see Table 8).

In sum, the hypothesis that the style used at the global level was associated with the consistency of style was supported, that is, the global style was positively associated with the consistency of the corresponding style used across domains. In addition, global identity style showed different associations according to the salience of specific domains.

Table 7

Relations between Global Style and Style Used at Different Levels of Hierarchy

Styles Used in Different Levels of the Hierarchy	Informational Style	Normative Style	Diffuse Style
1st domain			
Info. style	.19*	-.05	-.17*
Norm. style	-.12*	.28*	.02
Diff. style	-.29*	.02	.30*
2nd domain			
Info. style	.17*	.00	-.19*
Norm. style	-.10	.28*	-.01
Diff. style	-.29*	.07	.26*
3rd domain			
Info. style	.18*	.00	-.18*
Norm. style	-.05	.27*	-.05
Diff. style	-.29*	-.05	.31*
4th domain			
Info. style	.18*	-.01	-.18*
Norm. style	-.07	.11	.03
Diff. style	-.20*	-.05	.23*
5th domain			
Info. style	.26*	-.10	-.24*
Norm. style	-.02	.14*	-.02
Diff. style	-.19*	.05	.18*
6th domain			
Info. style	.21*	-.01	-.22*
Norm. style	-.03	.08	.00
Diff. style	-.21*	-.07	.25*
7th domain			
Info. style	.12*	-.02	-.12*
Norm. style	.02	.21*	-.09
Diff. style	-.06	-.03	.09

* $p < .01$ (given the number of correlation tests, a more conservative significance criteria was used)

Table 8

Relations between Identity Style and Domain Saliency

Identity Domain Saliency	Global Informational Style			Global Normative Style			Global Diffuse Style		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Family	-.02	-.10	-.00	.25*	.28*	.21*	-.09	-.03	-.08
Dating Partner	.05	-.03	.09	-.01	-.00	-.03	-.06	.02	-.11
Religious Beliefs	.00	.05	-.04	.28*	.26*	.29*	-.12*	-.15	-.10
Political Beliefs	-.00	.03	.00	-.26*	-.25*	-.25*	.08	.06	.08
Major/Future Career	.16*	.17	.14	-.16*	-.07	-.25*	-.10	-.15	-.04
Recreation	-.05	.00	-.04	-.18*	-.20*	-.15	.14*	.09	.14
Friends	-.16*	-.17	-.17	.04	-.02	.08	.18*	.20*	.18*

* $p < .01$ (given the number of correlation tests, a more conservative significance criteria was used).

Identity Style and Identity Structure Integration

Question 2 addressed relations between global identity style and identity structure integration. Correlations were computed for the global styles and the vertical integration score. As predicted, the global informational and normative styles were positively related to integration, and the global diffuse style was negatively related to the integration. Thus, greater use of the informational style or normative style was associated with a more highly integrated identity structure, whereas greater use of the diffuse style was associated with a less integrated structure. No significant gender differences were found ($z = .11$ for informational style; $z = -.31$ for normative style) (see Table 9).

Table 9

Gender Differences in Correlations between Identity Structure Integration and Identity Styles

	Total	Integration Male	Female
Global Informational Style	.18**	.19*	.18*
Global Normative Style	.10*	.11	.09
Global Diffuse Style	-.22**	-.20**	-.23**

* $p < .05$. ** $p < .01$

Identity and Well-being

The third and final set of questions addressed associations between identity and well-being. Question 3(a) asked about linkages between identity style and well-being. Correlations indicated that the global informational style was positively related, and the global diffuse style was negatively related, to all the subscales of well-being. The global normative style was positively associated with positive relations with others, purpose in life, and self-acceptance, negatively related to autonomy and personal growth, and not related to environmental mastery (see Table 10). Gender differences were found only for

the correlations between the normative style and environmental mastery and self-acceptance, and for personal growth and the informational and diffuse styles. Males showed a significant and positive association between global normative style and environmental mastery and self acceptance, whereas females did not. Additionally, males had a stronger, positive relation between global informational style and personal growth ($z= 2.94$) and a stronger negative relation between global diffuse style and personal growth than females did ($z= 2.26$).

Table 10

Relations between Global Style and Well-being

Well-being	Global Informational style			Global Normative style			Global Diffuse style		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Autonomy	.41*	.37*	.46*	-.26*	-.23*	-.28*	-.40*	-.36*	-.45*
Env. Mastery	.46*	.42*	.48*	.11	.16	.05	-.53*	-.49*	-.55*
Personal Growth	.52*	.62*	.42*	-.25*	-.28*	-.28*	-.45*	-.53*	-.36*
Pos. Rel. w/Others	.27*	.28*	.24*	.18*	.16	.16*	-.34*	-.32*	-.32*
Purpose in Life	.49*	.49*	.48*	.19*	.21*	.15*	-.58*	-.57*	-.59*
Self-Accept	.42*	.38*	.44*	.16*	.20*	.11	-.51*	-.47*	-.53*

* $p < .01$ (given the number of correlation tests, a more conservative significance criteria was used)

Regression analyses were conducted to test whether gender moderated the relations between global style and well-being. Dependent variables were the subscales of well-being and independent variables were global styles and gender (See Table 11). The identity style variables were centered and gender was effect coded (male=-1, female=1) before interaction terms were constructed. Using hierarchical regression analyses, interactions between gender and informational style as well as gender and diffuse style were found in the prediction of personal growth. No interactions were found for normative style and gender. Post hoc testing indicated that informational style was

positively and significantly related to personal growth for males and females but it was more strongly related to personal growth for males than females by approximately 55% $((1.914-1.236)/1.263)$. Diffuse style was negatively and significantly related to personal growth for both genders and it was more strongly related to personal growth for males than females by approximately 60% $((-.1667)-(-.1051))/(-.1051)$. The calculation tables used for the post hoc testing of the interaction effects can be found in Appendix B-6.

Table 11

Tests of Gender Moderation of the Relations between Global Identity Style and Well-being

	Model 1				R ² Chg	Model 2		
	R ²	B	SE	β		B	SE	β
AUTONOMY								
Global Info. style		1.45	.14	.42*		1.43	.14	.41*
Gender		-.07	.03	-.10		-.07	.03	-.10
Info. style X Gender						.28	.14	.08
	.18*				.01			
Global Norm. style		-.89	.15	-.26*		-.87	.15	-.25*
Gender		-.03	.03	-.04		-.03	.03	-.04
Norm. style X Gender						-.17	.16	-.05
	.07				.00			
Global Diff. style		-1.44	.15	-.42*		-1.41	.15	-.41*
Gender		-.08	.03	-.10		-.25	.10	-.34*
Diff. style X Gender						-.27	.15	-.25
	.17*				.01			
ENVIRON. MASTERY								
Global Info. style		1.54	.14	.45*		1.53	.14	.45*
Gender		.02	.03	.03		.02	.03	.03
Info. style X Gender						.13	.14	.04
	.21*				.00			
Global Norm. style		.34	.16	.10		.35	.16	.10
Gender		.05	.03	.07		.05	.03	.07
Norm. style X Gender						-.19	.16	-.06
	.02				.00			
Global Diff. style		-1.80	.13	-.53*		-1.79	.14	-.53*
Gender		.01	.03	.01		-.06	.09	-.09
Diff. style X Gender						-.11	.14	-.11
	.28*				.00			
PERSONAL GROWTH								
Global Info. style		1.55	.12	.50*		1.58	.12	.51*
Gender		.13	.03	.20*		.13	.02	.20*
Info. style X Gender						-.34	.12	-.11*
	.31*				.01*			
Global Norm. style		-.84	.13	-.27*		-.84	.13	-.27*
Gender		.17	.03	.27*		.17	.03	.27*
Norm. style X Gender						.03	.13	.01
	.14*				.00			
Global Diff. style		1.33	.13	-.42*		-1.36	.13	-.44*
Gender		.13	.03	.20*		.33	.09	.51*
Diff. style X Gender						.31	.13	.33*
	.24*				.01			

* p<.01(given the number of correlation tests, a more conservative significance criteria was used)

Table continues on next page

Table 11 (continued)

<i>Predicting Well-being with Global Identity styles and Gender</i>								
	Model 1				Model 2			
	R ²	B	SE	β	R ² Chg	B	SE	β
POS. REL. w/ OTHERS								
Global Info. style		.93	.16	.24*		.93	.17	.25*
Gender		.18	.03	.23*		.18	.03	.23*
Info. style X Gender						-.01	.17	-.00
	.12*				.00			
Global Norm. style		.60	.17	.16*		.60	.17	.16*
Gender		.19	.04	.24*		.19	.04	.24*
Norm. style X Gender						.04	.17	.01
	.09*				.00			
Global Diff. style		-1.20	.16	-.31*		-1.19	.16	-.31*
Gender		.17	.03	.22*		.13	.11	.16
Diff. style X Gender						-.07	.16	-.06
	.16*				.00			
PURPOSE IN LIFE								
Global Info. style		1.63	.14	.47*		1.64	.14	.47*
Gender		.15	.03	.20*		.15	.03	.20*
Info. style X Gender						-.10	.14	-.03
	.28*				.00			
Global Norm. style		.62	.15	.18*		.63	.15	.18*
Gender		.18	.03	.24*		.18	.03	.24*
Norm. style X Gender						-.14	.15	-.04
	.09*				.00			
Global Diff. style		-1.98	.13	-.56*		-1.99	.13	-.57*
Gender		.14	.03	.19*		.19	.09	.26
Diff. style X Gender						.09	.13	.08
	.38*				.00			
SELF-ACCEPTANCE								
Global Info. style		1.69	.17	.41*		1.67	.17	.41*
Gender		.04	.04	.05		.04	.04	.05
Info. style X Gender						.18	.17	.04
	.18*				.00			
Global Norm. style		.62	.19	.15*		.63	.19	.15*
Gender		.07	.04	.08		.07	.04	.08
Norm. style X Gender						-.16	.19	-.04
	.03*				.00			
Global Diff. style		-2.07	.16	-.51*		-2.05	.16	-.50*
Gender		.03	.04	.03		-.09	.11	-.11
Diff. style X Gender						-.19	.16	-.15
	.26*				.00			

* p<.01(given the number of correlation tests, a more conservative significance criteria was used)

Question 3(b), addressed whether well-being was related to consistency of style used across domains or domain salience. Examination of the zero-order correlations indicated that the consistency of using the informational style across the different domains was positively related to all of the well-being subscales, and the consistency of the diffuse style showed the opposite pattern. Consistency of using the normative style was positively associated with positive relations with others, and purpose in life, negatively associated with autonomy, and not related to environmental mastery, personal growth or self-acceptance (see Table 12). These findings indicate that consistency in general does not matter, but the consistency of a specific style matters for well-being, and in specific ways.

Table 12

Correlation between Well-being and Identity Style Consistency

Well-being	Consistency of Certain Style in Cluster Analysis								
	Informational style			Normative style			Diffuse style		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Autonomy	.16*	.19*	.15	-.17*	-.20*	-.15*	-.17*	-.26*	-.13
Environ. Mastery	.21*	.17	.23*	.03	-.02	.04	-.36*	-.44*	-.29*
Personal Growth	.30*	.32*	.25*	.05	.05	-.02	-.31*	-.40*	-.20*
Pos. Rel. With Others	.23*	.18	.23*	.18*	.06	.21*	-.30*	-.44*	-.17*
Purpose In Life	.33*	.29*	.33*	.11	.07	.09	-.41*	-.48*	-.33*
Self-Acceptance	.23*	.21*	.23*	.07	.04	.07	-.29*	-.36*	-.22*

* $p < .01$ (given the number of correlation tests, a more conservative significance criteria was used)

Hierarchical regression analyses were conducted to test whether gender moderated relations between consistency and well-being. The subscales of well-being were the dependent variables and consistency of styles being used and gender were the independent variables (see Table 13).

Before constructing the interaction terms, the consistency score for each style was centered. Results of the hierarchical regression tests indicated that the interaction between gender and consistency of the diffuse style significantly predicted positive relations with others and purpose in life. Post hoc testing was conducted to assess the significant associations between well-being and consistency of using diffuse style for males and females. The association between using diffuse style consistently and positive relations with others and purpose in life were all significant and negative for both males and females, but the relation was more strongly related for males than for females by approximately 323% $\frac{((-0.186)-(-0.044))}{(-0.044)}$ and 100% $\frac{((-0.194)-(-0.096))}{(-0.096)}$ for positive relations with others and purpose in life respectively (see Appendix B-7).

Table 13

Tests of Gender Moderation of the Relations between Identity Style Consistency and Well-being

	Model 1			R ² _{chg}	Model 2			
	R ²	B	SE		β	B	SE	β
AUTONOMY								
Info. style		.07	.02	.14*		.07	.02	.14
Norm. style		-.09	.02	-.21*		-.09	.02	-.22*
Diff style		-.07	.02	-.16		-.07	.02	-.18
Gender		-.09	.06	-.07		-.09	.06	-.07
Info. style X Gender						.01	.02	.01
Norm. style X Gender						.01	.02	.02
Diff style X Gender						.02	.02	.05
	.09*				.00			
ENVI. MASTERY								
Info. style		.05	.02	.10		.04	.02	.09
Norm. style		-.02	.02	-.05		-.02	.02	-.05
Diff style		-.14	.02	-.33*		-.15	.02	-.35*
Gender		.04	.06	.03		.04	.06	.03
Info. style X Gender						.03	.02	.07
Norm. style X Gender						.02	.02	.04
Diff style X Gender						.04	.02	.10
	.14*				.01			
PERSONAL GROWTH								
Info. style		.09	.02	.21*		.09	.02	.21*
Norm. style		-.02	.02	-.05		-.02	.02	-.05
Diff style		-.09	.02	-.22*		-.09	.02	-.24*
Gender		.27	.05	.21*		.26	.05	.20*
Info. style X Gender						.00	.02	.00
Norm. style X Gender						-.00	.02	-.01
Diff style X Gender						.04	.02	.11
	.18*				.01			
POS. REL. w/OTHERS								
Info. style		.06	.02	.12		.06	.02	.11
Norm. style		.04	.02	.10		.04	.02	.08
Diff style		-.10	.02	-.22*		-.12	.02	-.25*
Gender		.32	.07	.20*		.32	.07	.20*
Info. style X Gender						.04	.02	.08
Norm. style X Gender						.04	.02	.09
Diff style X Gender						.07	.02	.15*
	.16*				.03*			

* p<.01 (given the number of correlation tests, a more conservative significance criteria was used)

Table continues on next page

Table 13 (continued)

Predicting Well-being with Consistency of Using Certain Style and Gender

	Model 1				R ² _{chg}	Model 2		
	R ²	B	SE	β		B	SE	β
PURPOSE IN LIFE								
Info. style		.10	.02	.20*		.09	.02	.19*
Norm. style		.00	.02	.01		.00	.02	-.00
Diff style		-.14	.02	-.32*		-.15	.02	-.34*
Gender		.28	.06	.19*		.27	.06	.19*
Info. style X Gender						.03	.02	.05
Norm. style X Gender						.01	.02	.02
Diff style X Gender						.05	.02	.11*
	.25*				.01			
SELF-ACCEPTANCE								
Info. style		.08	.03	.14*		.08	.03	.14*
Norm. style		.00	.02	.00		-.00	.02	-.00
Diff style		-.12	.02	-.24*		-.12	.02	-.25*
Gender		.08	.08	.05		-.08	.08	.05
Info. style X Gender						.03	.03	.05
Norm. style X Gender						.01	.02	.02
Diff style X Gender						.04	.02	.08
	.11*				.01			

* p<.01(given the number of correlation tests, a more conservative significance criteria was used)

In the examination of associations between domain salience and well-being, correlations indicated substantial variability across domains and aspects of well-being. The salience of major/future career was positively related to purpose in life. The salience of the religious beliefs domain was positively related to environmental mastery, positive relations with others, purpose in life and self-acceptance. In contrast, the salience of the political beliefs domain was negatively related to environmental mastery, positive relations with others, and self-acceptance. The salience of the recreation domain was negatively related to positive relations with others and purpose in life. Finally, the salience of the friend domain was negatively related to autonomy, and purpose in life, but positively related to positive relations with others (see Table 14).

Table 14

Correlations between Salience of Identity Domains and Well-being

Salience: Reflect Who You Are	Autonomy			Environmental mastery			Personal Growth		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Family	-.09	-.13	-.05	.07	-.02	.10	.06	-.02	.01
Dating Partner	.05	.05	.06	.06	.04	.07	-.09	-.13	-.09
Religious Beliefs	.07	.03	.10	.12*	.07	.15*	.06	.09	.03
Political Beliefs	.07	.01	.10	-.12*	-.19	-.05	-.06	-.09	.03
Major/Career	.02	.02	.02	-.03	-.03	-.05	.12	.04	.13
Recreation	-.02	.04	-.09	-.10	.03	-.18*	-.04	.08	.00
Friends	-.13*	-.06	-.18*	-.04	.02	-.09	-.05	-.03	-.10

Salience: Reflect Who You Are	Positive relations with others			Purpose in Life			Self-acceptance		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Family	.11	.02	.08	.09	-.01	.05	.08	.02	.09
Dating Partner	-.07	-.09	-.08	.01	-.06	.05	.03	.01	.03
Religious Beliefs	.15*	.13	.15*	.15*	.17	.12	.12*	.14	.10
Political Beliefs	-.22*	-.24*	-.14	-.12	-.12	-.04	-.14*	-.23*	-.05
Major/Career	-.04	-.05	-.08	.13*	.09	.13	-.00	-.05	.01
Recreation	-.12*	.03	-.12	-.17*	-.04	-.17*	-.08	.01	-.10
Friends	.17*	.16	.16*	-.14*	-.10	-.20*	-.05	.04	-.12

* $p < .01$ (given the number of correlation tests, a more conservative significance criteria was used)

Question 3(c) concerned the relationship between the identity structure integration and well-being. As expected, the integration of structure was significantly and positively correlated with all the subscales of well-being. All the correlations were significant at $p < .01$ (see Table 15). No gender differences were found.

Table 15

Correlations between Well-being and Integration

	Integration		
	Total	Male	Female
Autonomy	.15*	.13	.14
Environ. Mastery	.37*	.35*	.39*
Personal Growth	.15*	.18	.14
Pos. Rel. with Others	.24*	.27*	.25*
Purpose in Life	.27*	.32*	.26*
Self-acceptance	.34*	.31*	.37*

* $p < .01$

Integration was hypothesized to be related to well-being curvilinearly. Curve estimation regression was used to test the linear and quadratic equations with integration and square of integration as independent variables. However, none of the regression equations were significant, indicating that the relationship between identity integration and well-being was linear (see Table 16).

Regression analyses were conducted to examine the interaction of gender and structure integration in the prediction of well-being. Dependent variables were the well-being subscales, and independent variables were integration and gender. Integration was centered before calculating the interaction terms. The results of the hierarchical regression analyses yielded no interactions between integration and gender, but did indicate support for gender and identity structure integration uniquely adding to variance explained in young adult well-being, such as personal growth, positive relations with others and purpose in life (see Table 17).

Table 16

Predicting Well-being with Integration Curvilinearly

	R ²	B	SE	β
AUTONOMY	.02			
Integration		-.05	.07	-.17
Integration square		.01	.00	.32
ENVIRON. MASTERY	.14			
Integration		.22	.07	.71**
Integration square		-.01	.00	-.35
PERSONAL GROWTH	.02			
Integration		.06	.07	.22
Integration square		-.00	.00	-.07
POS. REL. WITH OTHERS	.06			
Integration		.11	.08	.30
Integration square		-.00	.01	-.05
PURPOSE IN LIFE	.08			
Integration		.17	.07	.52*
Integration square		-.01	.00	-.25
SELF-ACCEPTANCE	.12			
Integration		.23	.08	.62**
Integration square		-.01	.01	-.28

* p< .05. ** p<.01

Table 17

Tests of Gender Moderation of the Relations between Identity Integration and Well-being

	Model 1			Model 2				
	R ²	B	SE	β	R ² Chg	B	SE	β
AUTONOMY								
Integration		.04	.01	.14*		.04	.01	.14
Gender		-.08	.07	-.06		-.08	.07	-.06
Integr. X gender						.01	.01	.02
	.02*				.00			
ENV. MASTERY								
Integration		.12	.01	.37*		.12	.01	.37*
Gender		.10	.06	.07		.10	.06	.07
Integr. X gender						.01	.01	.02
	.14*				.00			
PERSONAL GROWTH								
Integration		.04	.01	.15*		.04	.01	.15*
Gender		.33	.06	.25*		.33	.06	.25*
Integr. X gender						-.01	.01	-.03
	.09*				.00			
POS. REL. WITH OTHERS								
Integration		.09	.02	.25*		.09	.02	.25*
Gender		.40	.07	.25*		.40	.07	.25*
Integr. X gender						.00	.02	.01
	.13*				.00			
PURPOSE IN LIFE								
Integration		.09	.01	.28*		.09	.01	.28*
Gender		.37	.06	.25*		.37	.06	.25*
Integr. X gender						-.02	.01	-.05
	.14*				.00			
SELF-ACCEPTANCE								
Integration		.13	.02	.35*		.13	.02	.34*
Gender		.15	.07	.09		.15	.07	.09
Integr. X gender						.01	.02	.04
	.13*				.00			

* $p < .01$ (given the number of correlation tests, a more conservative significance criteria was used)

Finally, question 3(d), asked whether identity style and identity structure were additive in their explanation of variance in young adults' well-being, as well as whether identity structure, in terms of high versus low integration, moderated relations between style and well-being. The three identity styles served as the moderated variables, and the

moderator was integration level (high vs. low). The six subscales of well-being were the dependant variables. The centered identity style and integration variables were used to construct product terms. Multiple regression analyses were run for each subscale of well-being; each of the interaction terms was tested separately.

Examination of the main effects indicated that identity style and identity integration typically (13 out of 18 tests) were additive in their explanation of variance in young adult well-being. A moderated relationship was marginally found only in the prediction of autonomy (see Table 18). Therefore, identity structure does not moderate the relations between identity style and well-being in most cases. Identity structure and identity styles are more additive than interactive in the relationship with well-being. In spite of the limited findings for a moderated relationship, further steps were taken to examine the significant two-way interactions that were detected (see Appendix B-8 for the post hoc calculation tables). The analyses showed that the global informational style positively predicted well-being, and the global normative and diffuse style negatively predicted well-being under the conditions of both high and low integration. Opposite of what was expected, under the condition of low integration, informational style had a one and a half times stronger association with autonomy than under the condition of high integration. Diffuse style had almost a two and a half times stronger relationship with autonomy in the case of low integration than high integration and normative style was one and a half times more negatively related to autonomy when identity integration was low compared to when it was high (see Figure 1).

Table 18

Tests of Identity Structure Moderation of the Relations between Identity Style and Well-being

	Model 1			Model 2				
	R ²	B	SE	β	R ² chg	B	SE	β
AUTONOMY								
Global Info. style		1.41	.15	.41*		1.37	.15	.40*
Integration		.02	.01	.07		.02	.01	.06
Gender		-.15	.06	-.10		-.14	.06	-.10
Info. style X Integ.						-.12	.07	-.08
	.18*				.01			
Global Norm. style		-.95	.15	-.27*		-.96	.15	-.28*
Integration		.05	.01	.17*		.05	.01	.16*
Gender		-.06	.06	-.04		-.07	.06	-.05
Norm. style X Integ						.17	.07	.10
	.10*				.01			
Global Diff style		-1.40	.15	-.40*		-1.38	.15	-.39*
Integration		.02	.01	.05		.11	.05	.36
Gender		-.15	.06	-.10		-.15	.06	-.11
Diff style X Integ						.15	.07	.32
	.17*				.01			
ENV.MASTERY								
Global Info. style		1.35	.13	.40*		1.33	.14	.39*
Integration		.09	.01	.30*		.09	.01	.30*
Gender		.04	.06	.03		.06	.06	.04
Info. style X Integ						-.04	.06	-.03
	.30*				.00			
Global Norm. style		.21	.15	.06		.21	.15	.06
Integration		.11	.01	.37*		.11	.01	.36*
Gender		.10	.06	.07		.09	.06	.06
Norm. style X Integ						.08	.07	.05
	.15*				.00			
Global Diff style		-1.60	.13	-.47*		-1.59	.13	-.46*
Integration		.08	.01	.27*		.13	.04	.40*
Gender		.03	.05	.02		.03	.05	.02
Diff style X Integ						.06	.06	.14
	.35*				.00			

* p<.01 (given the number of correlation tests, a more conservative significance criteria was used)

Table continues on next page

Table 18 (continued)

Tests of Identity Structure Moderation of the Relations between Identity Style and Well-being

	Model 1				Model 2			
	R ²	B	SE	β	R ² chg	B	SE	β
PERSONAL GROWTH								
Global Info. style		1.51	.12	.49*		1.49	.12	.48*
Integration		.02	.01	.06		.02	.01	.07
Gender		.26	.05	.20*		.27	.05	.21*
Info. style X Integ.						-.00	.06	-.00
	.31*				.00			
Global Norm. style		-.90	.13	-.29*		-.90	.13	-.29*
Integration		.05	.01	.18*		.05	.01	.18*
Gender		.35	.05	.27*		.34	.05	.27*
Norm. style X Integ.						.07	.06	.05
	.17*				.00			
Global Diff style		-1.28	.13	-.41*		-1.28	.13	-.41*
Integration		.02	.01	.06		.04	.04	.13
Gender		.27	.05	.21*		.27	.05	.21*
Diff style X Integ.						.03	.06	.06
	.25*				.00			
POS. REL WITH OTHERS								
Global Info. style		.78	.16	.21*		.79	.16	.21*
Integration		.07	.02	.21*		.08	.02	.22*
Gender		.37	.07	.23*		.37	.07	.23*
Info. style X Integ.						.05	.08	.03
	.17*				.00			
Global Norm. style		.51	.16	.13*		.51	.16	.13*
Integration		.08	.02	.24*		.08	.02	.23*
Gender		.39	.07	.24*		.38	.07	.24*
Norm. style X Integ.						.03	.08	.02
	.14*				.00			
Global Diff style		-1.04	.16	-.27*		-1.05	.16	-.27*
Integration		.07	.02	.19*		.02	.05	.05
Gender		.35	.07	.22*		.35	.07	.22*
Diff style X Integ.						-.08	.08	-.15
	.20*				.00			

* p<.01(given the number of correlation tests, a more conservative significance criteria was used)

Table continues on next page

Table 18 (continued)

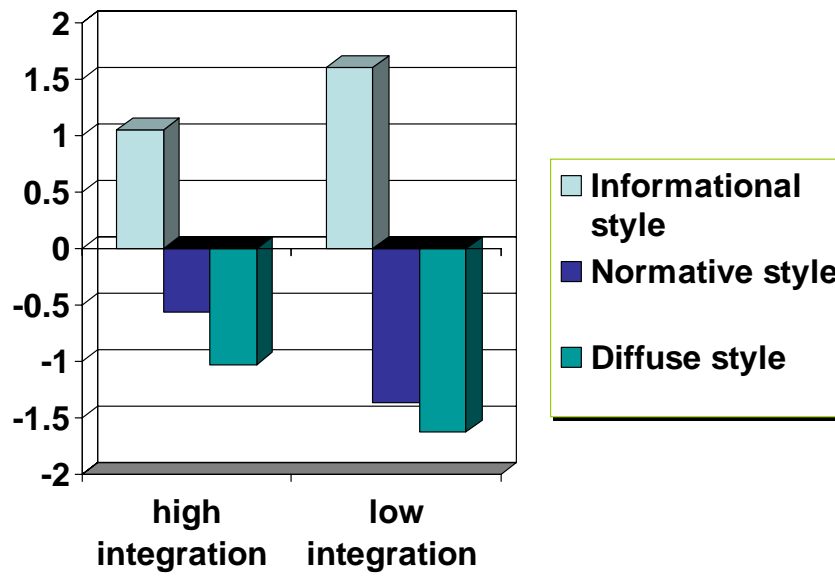
Tests of Identity Structure Moderation of the Relations between Identity Style and Well-being

	Model 1			Model 2				
	R ²	B	SE	β	R ² chg	B	SE	β
PURPOSE IN LIFE								
Global Info. style		1.51	.14	.43*		1.52	.14	.43*
Integration		.06	.01	.20*		.07	.01	.20*
Gender		.30	.06	.21*		.30	.06	.21*
Info. style X Integ.						.03	.06	.02
	.32*				.00			
Global Norm. style		.52	.15	.15*		.52	.15	.15*
Integration		.08	.01	.26*		.08	.01	.26*
Gender		.35	.06	.24*		.34	.06	.23*
Norm. style X Integ.						-.03	.07	-.02
	.16*				.00			
Global Diff style		-1.85	.13	-.53*		-1.86	.13	-.53*
Integration		.05	.01	.16*		.04	.04	.14
Gender		.28	.05	.19*		.28	.05	.20*
Diff style X Integ.						-.02	.06	-.04
	.40*				.00			
SELF-ACCEPTANCE								
Global Info. style		1.48	.17	.36*		1.45	.17	.36*
Integration		.11	.02	.28*		.11	.02	.28*
Gender		.09	.07	.05		.10	.07	.06
Info. style X Integ.						-.08	.08	-.04
	.26*				.00			
Global Norm. style		.48	.18	.12*		.47	.18	.12*
Integration		.13	.02	.34*		.12	.02	.33*
Gender		.14	.07	.08		.14	.07	.08
Norm. style X Integ.						.10	.09	.05
	.14*				.00			
Global Diff style		-1.85	.16	-.45*		-1.84	.16	-.45*
Integration		.09	.01	.25*		.15	.05	.40*
Gender		.07	.07	.04		.06	.07	.04
Diff style X Integ.						.09	.07	.16
	.32*				.00			

* p<.01 (given the number of correlation tests, a more conservative significance criteria was used)

Figure 1

Interaction between Identity Style and Structure in Predicting Well-being



DISCUSSION

The main purpose of the current study was to examine identity from the Eriksonian perspective, where identity is viewed as helping an individual to interpret experiences and to guide future action so as to promote the individual's fit into the society (Erikson, 1959, 1968). Berzonsky's identity style paradigm was adopted because identity style describes the process of identity formation that includes the handling of problems related to identity and demonstrates important functions of identity: interpretation and guidance. In addition to identity style, identity structure also was assessed. Whereas identity style assists with focusing on the process of identity formation, identity structure serves the function of organizing and integrating one's identity. The findings of the current study help elucidate how identity style and structure are interrelated. Also examined were associations among these two dimensions of identity with young adult well-being. The well-being variables selected served to indicate the extent to which the young adults in the current study experienced the fit within society that identity is theorized to influence.

In brief, the findings of the current study show that identity styles are related to identity structure hierarchy and integration. Identity styles are related to the styles used at different levels of hierarchy and the salience of different domains. Identity structure integration is related to the three identity styles in different ways. In addition, salience levels of different identity domains are associated with well-being differently. Identity

styles and identity structure integration are related to well-being as expected and they predicted well-being additively rather than interactively. Given the multiple findings that informational and diffuse style related to other variables as polar opposites, this suggests there might be two dimensions in identity styles rather than three. What follows is a discussion of how the findings of the current study are associated with, and contribute to, the current identity literature.

Identity Style and Structure Hierarchy

Global style and styles used within domains. The assessment of identity style, globally and across domains was used to understand Berzonsky's (1990) hypothesis that although identity styles used in domains might shift considerably during adolescence, by adulthood (with the capability of using all three styles) individuals tend to prefer using one style more than the others. The findings for the current study indicated that global style and styles used in the identity hierarchy structure were associated as expected. Global identity style was related to the consistency of the corresponding style used in different domains across different levels of the identity hierarchy. In other words, when a young adult prefers a specific style, he/she tends to use it frequently, across domains and situations. On the other hand, the biggest relations found were .30, so the link between global style and style used at different levels of hierarchy is not very strong. Therefore, the variance of using three styles indicates that individuals use different styles flexibly within and across the identity domains as well.

Global style and identity structure salience. Global informational style was found to be related positively to the salience of the major/future career domain and negatively to

the salience of friendship domain; diffuse style revealed positive associations with the salience of the friendship and recreation domains and negative associations with the religious beliefs and major/future career domain. Normative style showed positive associations with the salience of the family and religious beliefs domains, and negative associations with the salience of the political beliefs, major/future career and recreation domains. One possible implication of these findings is that the salience level of a certain domain may elicit the use of a particular style. For example, the salience of major/future career may elicit informational style, and discourage use of the normative and diffuse styles because the more important a person's major and future career, the more s/he is likely to emphasize gathering information to decide who s/he is becoming in this domain. The salience of family may encourage use of the normative style. When young adults prioritize family, they are inclined to follow parents' or significant family members' opinions. The salience of religious beliefs also may promote use of the normative style and discourage use of the diffuse style. When religion is a major concern in life, young adults would use the bible (an authority) as a reference for making important decisions in life. The association of the salience of friend domain with greater use of the diffuse style, may be due to this domain typically centering around engagement of behaviors aimed at promoting acceptance. When young adults think friends are extremely important, they try to follow friends' opinions in different situations. In this case, diffuse style is more efficient in helping them maintain their identity within the friend domain.

Thus, when a domain is salient, this may increase the likelihood of using the style most consistent with it. A salient domain may elicit the style that works most efficiently

within it and over time that style tends to become the global style used. This supports the notion that structure serves as a filter, determining what young adults attend to and how they process information (Berzonsky, 2003b; Levine, 2003). It also is plausible, however, that the global style might influence identity structure salience. How one processes identity information may, overtime, lead to how one organize one's identity structure (Kroger, 2003; Kunnen & Bosma, 2003). It is possible, for example, that individuals who tend to use an informational style might rate major/career as the most salient because this domain tends to offer more opportunities for independent decision making (especially when a major and career are freely chosen). More research is needed to examine the dynamic associations between style and domain salience.

In summary, the relationship between identity style and identity structure salience has not been examined in previous research. What the findings of the current study suggest is the likelihood of a dynamic interaction between identity style and structure salience. Global identity style appears consistent with styles used across domains and different levels of hierarchy, however, identity style may be affected by characteristics of a particular domain, where salience of an identity domain can contribute to the identity style used, and conversely, style preferences may strengthen identity domain preferences.

Identity Style and Identity Structure Integration

When individuals used the informational or normative style more, they tended to have higher integration. When they used the diffuse style more, individuals tended to have lower integration. This finding is consistent with the hypothesis of Berzonsky (1990, 2003a; Berzonsky, Macek & Nurmi, 2003) that informational and normative style

were positively related to integration and diffuse style was negatively related to integration, even though he used commitment as an indicator of integration level. Although not possible to document in the current study, this association, again, suggests that identity style and identity structure affect one another dynamically. Identity style suggests the process by which individuals integrate identity domains together, helping to give rise to a more complex identity structure over time. On the other hand, the extent to which a person has an integrated identity structure may delimit the way in which identity processes operate. A well integrated structure might facilitate using informational and normative style, whereas poor integration might elicit using the diffuse style or inhibit using informational or normative style. Thus, over time, process gives rise to structure and structure affords and constrains the ways in which process (style) operates.

Findings for Associations between Identity Styles and Well-being

Multiple analyses indicated that identity styles were found to be associated with well-being as hypothesized. Specifically, both global informational style and consistent use of the informational style across domains were positively related to all indicators of well-being, and the global and consistent use of the diffuse style showed the opposite pattern. The global normative style and consistent use of the normative style across domains were negatively related to autonomy, and positively related to positive relations with others and purpose in life.

The finding in the current study that identity styles were linked to well-being is generally consistent with previous work. For example, Berzonsky and Kuk (2000) found that informational style was related to high academic autonomy, emotional autonomy,

mature interpersonal relationships, and educational and career objectives. Diffuse style was negatively related to academic autonomy, and mature relationships with others, whereas, normative styles was positively related to academic autonomy, educational objectives, and negatively related to mature relationships with others. Berzonsky and Ferrari (1996) also found that informational style was positively related, and diffuse style was negatively related, to autonomy. Even with different measurement, the findings in these studies show patterns consistent with the current study. In addition, Vleioras (2002) uncovered similar findings in a Greek sample using the same well-being measure as that used in the current study. He found that informational style was positively related, and diffuse style was negatively related, to all indicators of well-being. Vleioras also found that normative style was positively related to environmental mastery. However, in the current study the global normative style was not related to environmental mastery for females, but it was for males. In addition, the current study found that the global normative style was negatively related to autonomy and personal growth and positively associated with positive relations with others, purpose in life and self acceptance. In other words, normative style motivates individuals to find an authority, a person or a set of rules, which usually provides a guide for life and future, emphasizes relations with environment, and discourages searching for other rules or establishing one's own rules. Consequently, individuals who more strongly use a normative style tend to have positive relations with others, purpose in life and self-acceptance, because of accepting rules, however, they may not be able to find their own paths in life without these guides, and would not be expected to exhibit high levels of autonomy. Differences between the

current study and Vleioras' study may be due to the different samples (Greek vs. US college students), or different measurement of identity styles (ISI vs. CIQ). The United States, compared to Greece is more diversified in culture and values, and offers more freedom and choice for young adults' development. Normative style may benefit young adults in handling confusion more in the United States than in Greece where there is less opportunity for role confusion. In terms of measurement, the ISI mixes the identity style with identity domains, and identity outcomes, whereas the CIQ measures identity style independent of domain and identity outcomes. As a result, people using normative style determined by ISI may not be same as those determined by CIQ.

Associations between Identity Structure and Well-being

Environmental mastery was negatively related to the salience of the political beliefs and recreation domains and was positively associated with the salience of the religious beliefs domain. Religion offers a clear guide for interpretation of the environment, whereas politics and recreation may offer no particular framework or a framework of uncertainty for interpreting the environment.

Personal growth was positively associated with the salience of the major/future career domain, but negatively with the dating partner domain. The major/future career domain encourages people focus on their individual development, whereas the dating partner domain may direct attention to the development of the relationship, and in some cases may undermine personal growth.

Positive relations with others was positively associated with the family and religious beliefs domains and negatively with the political beliefs and recreation domains.

It might be that family and religious beliefs emphasize harmonious relationships, whereas political beliefs and recreation do not, often emphasizing competition or individual interests. Autonomy was negatively associated with the salience of the friend and family domains which also may result from these domains emphasizing connections with others.

Purpose in life was positively related to the salience of the religious beliefs and major/future career domains, whereas the political beliefs, recreation and friends domains were negatively related to it. The salience of the latter three domains may be less likely to direct people to think about long term purpose in life than the former two domains do.

Finally, self acceptance was positively associated with the salience of the religious beliefs domain and negatively associated with the political beliefs domain. Religion might guide an individual to accept and internalize the values with which s/he has grown up, whereas a high investment in politics might stimulate individuals to question their values and possibly raise questions of uncertainty about what one believes and who one is. Future research will need to examine further the meaning individuals attach to specific identity domain.

Most of the previous studies have addressed identity salience and well-being in terms of stress and role conflict between two salient domains such as family and work (Wiley, 1991; Greenberger & O'Neil, 1993; Greenhaus, & Parasuraman, 2002; Simon, 1992). Another set of previous studies focus on the relationship between identity salience and performance in limited number of domains (Adler, & Adler, 1987; Lobel, & Clair, 1992; Shih, Pittinsky, & Ambaby, 1999). These past studies have addressed well-being and the salience of one or two domains, whereas, the current study examines identity

salience across many domains, and their relations with well-being. It offers a greater understanding of the overall identity structure rather than knowledge of only one or two specific domains. Taken together, the findings suggest that identity structure is related to well-being in terms of salience, and variation in the salience of different domains is related to different aspects of well-being.

The findings also indicate that the higher the integration an individual had, the more well-being he/she experienced. In the current study, integration level was positively associated with young adults' well-being which is partially consistent with previous work. Van Hoof and Raaijmakers (2002) found that the level of integration was positively related to well-being within certain limits, and too high or too low integration might be risky. The lack of a curvilinear relationship between integration and well-being found in the current study may be the result of the different sample, as well as the method of assessment and calculation of integration used. Van Hoof and Raaijmakers (2002) recruited adolescents in middle school and high school, and asked them to report on the contexts in which they were involved everyday and then measured the integration. The current study recruited young adults in college, who (theoretically) have a higher ability to integrate, and have richer experience in life and more freedom and opportunities to choose their environment than adolescents in middle or high school do. In addition, for the study conducted by van Hoof and Raaijmakers, most of the subjects integrated three or four contexts. If they integrated contexts well, they scored high in well-being. However, if they integrated the contexts too extensively this was associated with less well-being. Van Hoof and Raaijmakers (2002, 2003) suggested that too much integration

meant the person was not open enough to new contexts in life, would not be able to handle the challenges of new contexts, and would therefore experience decreased well-being. As a result, they argued that the relationship between identity integration and well-being for adolescents was curvilinear. In the current study, the young adults were requested to integrate seven identity domains which address most areas of identity development. It would be less likely for a new domain to challenge the current integration, and thus a highly integrated structure may not be problematic. Van Hoof and Raaijmakers (2002) used adjectives of four dimensions to measure identity: inhibition, interpersonal behavior, feelings, and competence. These adjectives have great variance but overlapped with well-being in some respects and did not measure identity directly. The current study employed a personal expressiveness measure which assessed identity directly but only from one aspect, and had less variability than the items used by van Hoof and Raaijmakers. Mathematically, the larger variance in van Hoof and Raaijmakers' study made it more possible to detect curvilinear relationships.

The Interaction of Style and Structure in the Prediction of Well-being

Identity styles and structure integration were found to be related to well-being separately, and predicted well-being additively, in most cases. This indicates that both style and structure are important dimensions of identity for understanding well-being in adulthood. Moreover, identity structure was found to moderate the relations between the identity styles and one indicator of well-being--autonomy. Under conditions of low integration, informational style had stronger positive relations with autonomy and normative style and diffuse style had stronger negative relations with autonomy. When

young adults had high identity integration, informational style was positively related to autonomy less strongly than under conditions of low identity integration. Low integration combined with greater use of the normative or diffuse style appears to offer the worst condition for young adult autonomy, whereas using the informational style may compensate for low integration. Integration was not found to moderate associations between identity style and the other five indicators of well-being. It may be that identity integration and identity styles are primarily additive, rather than interactive, in their prediction of well-being. Alternately, the way integration was measured may have influenced the possibility of finding moderation effects. It also is possible that other aspects of well-being or young adult adjustment than those measured in the current study have relations with identity style that are moderated by integration. Future work should continue to examine whether, and to what extent, identity integration and identity style interact in their explanation of young adult outcomes.

In summary, this study contributes to the research on identity theoretically and empirically. Global style appears to be consistent with style used across domains, but domain content may affect the style used. The nature of identity structure is an issue currently being debated by identity scholars and attempts to measure structure have been limited. This study focused on two key elements of identity structure: hierarchy and integration and helps to show the nature and importance of this identity dimension. Furthermore, the associations between identity styles and structure demonstrate that they are two important aspects of identity, helping guide individuals in their lives and serving to help them interpret and integrate information about the self. Although the findings for

identity styles and structure have support from Erikson's theory and Berzonsky's assumptions, more empirical work needs to be conducted in order to better understand how identity style and identity structure are formed and developed over time.

The findings for relations between identity style, structure and well-being contributes to the literature as well. The results of the current study with regard to style and well-being are supported by previous studies. Findings for relations between identity structure salience and well-being offer an overall perspective to understand salience beyond examining the conflict between two or three domains, or performance in a salient domain.

Gender, Identity and Well-being

Gender differences emerged for identity styles, structure, and young adults' well-being. Females tended to use informational style more, and diffuse style less than males did at both the global level, and across domains. Most studies on identity status have not reported gender differences and literature reviews have tended to conclude that gender differences did not exist in identity development generally (Kroger, 1997; Matteson, 1993; Meeus, Iedema & Vollebergh, 1999; Neimeyer, Prichard, Berzonsky, & Metzler, 1991; Waterman, 1985). However, gender differences were reported in specific domains. For example, Meeus, Iedema and Vollebergh (1999) and Archer (1985) found that more females than males tended to be in advanced identity statuses (achievement and moratorium) in relational identity (friendship and dating). Wiley (1991) found females valued family higher than males and had higher commitment to family than males did. Goossens (2001) reported more females than males in achievement status in the domain

of occupation, and more males than females in achievement status in the domain of political beliefs. Gender differences noted in the current study with regard to the salience of identity domains are in line with these past findings. In addition, females tended to rate family and major/future career more important than males did, and males were inclined to rate political beliefs and recreation as more important than females did. Different salience levels for major and political beliefs between genders in the current study might explain the different statuses of males and females in Goossens' work.

Gender differences were not found in several empirical studies examining identity style (Berzonsky, & Sullivan, 1992; Berzonsky, 1993; Berzonsky, 1994; Berzonsky, & Neimeyer, 1994); other studies, however, have shown that more females than males used informational style and fewer females than males used diffuse style (Berzonsky, 1992; Berzonsky, & Kuk, 2000). The current study supports the existence of gender differences in terms of females using the informational style more and diffuse style less, than males do (Berzonsky, 1992; Berzonsky, & Kuk, 2000).

Inconsistent findings also have appeared in studies on well-being. Allen, Hauser, Bell, and O'Connor (1994) reported no gender differences in predicting autonomy. However, other studies have shown that females were found to score higher than males in positive relations with others (Ryff, 1989; Ryff, & Keyes, 1995), personal growth (Ryff, 1989), educational purpose (Berzonsky & Kuk, 2000), and score lower than males in autonomy (Dornbusch, Ritter, Mont-Reynaud, & Chen, 1990). The findings in the current study that females tended to have higher personal growth, positive relations with others, and purpose in life than males did are in line with past findings.

Gender also was found to moderate relations between identity style and well-being. Global informational style was more strongly and positively related to autonomy and less strongly related to personal growth for females than it was for males. Global diffuse style was more strongly and negatively related to autonomy and less strongly related to personal growth for female than it was for males. When using informational style, females appear to benefit from it more than males do in terms of autonomy. Females rated family as more salient than males and may compromise to family members' expectation more than males. Females with informational style think and make decisions more by themselves and may compromise to family less and gain more autonomy. Females had higher personal growth than males when not considering identity style used. Informational style had a stronger association with personal growth for males than for females. The current study showed that females rated major/future career more important than males, and the salience of major/future career is associated with informational style. The salience of major/future career was positively related to personal growth for females but not males. This may explain why females had higher personal growth than males. However, informational style was associated with personal growth more for males, therefore, although females as a group report greater personal growth than males, males who use an informational style may be particularly focused on enhancing their personal growth. This points to the importance of future work examining variation within gender as well as between males and females. The opposite trend in diffuse style can be explained by the polar relationship between informational and diffuse style in CIQ measurement.

For females but not males, using the informational or normative style consistently was significantly and positively associated with positive relations with others. For males, using diffuse style consistently was more strongly and negatively associated with environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance than it was for their females counterparts. Thus, consistently using the diffuse style appears more detrimental for male than for female well-being.

Although many identity style researchers ignore gender, significant findings in the current study help to expand understanding of gender differences through examining the moderation effects of gender on associations between identity styles and well-being. Future studies should continue to explore gender variation in regard to identity and well-being, and look more closely at variation within gender as well.

Limitation and Future Directions

There are some important limitations to the current study. The sample of this study was recruited from undergraduate students in a Southeastern, public university. The majority were Caucasian. Future research should include young adults who do not pursue higher education and those from other ethnicities. In addition, examining the identity styles of the young adults who go to the job market directly after high school may reveal the importance of education on identity style formation.

Samples from other ethnicities or other cultures will help to show whether there are cultural influences on identity structure salience and identity style. Collectivist cultures might elicit normative and diffuse style rather than informational style. In fact, in some of the collectivist cultures where there are limited choices for adult roles, people

using a normative style might adapt better than those using an informational style. The salience of young adults' identity structure also would not be expected to have as much variance in collectivist cultures compared to the more independence-oriented cultures such as the United States. Thus, cross-cultural studies will be important for enriching knowledge about the nature and function of identity style and structure.

Another limitation is the way in which identity integration was measured in the current study. Different from the approach of van Hoof and Raaijmakers, a six-item personal expressiveness measure was used in the current study to assess the feelings related to identity within seven different domains as a means of for determining structure integration. High internal consistency of this measure led to a lack of variation which made it impossible, in the current study, to construct integration through the calculation of correlations. The integration level calculated in the current study cannot be generalized to other studies because the absolute differences were not divided by standard deviations, and therefore cannot be compared to integration level assessed with other samples. In future research, measurement which permits greater variation in responses or measurement that assesses identity integration using dimensions in addition to personal expressiveness should be adopted.

The cross-sectional nature of the current study also is a limitation. Data were collected at one point in time, and cannot demonstrate the developmental nature of identity. The change of structure as influenced by changes in the environment (Marcia, 1980; Levine, 2003; Kroger, 1997, 2003; Berzonsky, 2003b) and stability of structure (Berzonsky, Macek, & Nurmi, 2003) could not be demonstrated. Formation and

strengthening of a preferred global identity style also could not be assessed. Longitudinal studies will be imperative for assessing the dynamic associations between style and structure, and how identity formation relates to well-being in adulthood.

Despite its limitations, this study broadens the current knowledge on identity style and structure, raises many new research questions, and provides a basis for future research. New measures of structure integration should continue to be examined. More diverse samples need to be used to examine cultural and gender influences on identity and well-being. In addition, longitudinal studies need to be conducted to elucidate the dynamic interaction between structure and style over time and their associations with well-being in adulthood.

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APPENDIX A

Appendix A-1

1. Your age: 19 20 21 22 23 24 25 >25____(write in age)

2. Your year in school: a. freshman b. sophomore c. junior d. senior e. other_____ (please specify)

3. What is your major_____ (please write out in full)

4. Your race/ethnicity: African American Asian/Pacific Islander White(nonHispanic)
Hispanic/Latino Native American Other_____

5. Gender: male female

6. Your marital status: single (never married) in a first marriage remarried separated
divorced (living single) widowed

7. Mother's employment status: At home full time (not employed) Part-time paid employment
Full- time paid employment Other:_____

- What is her job: _____
- How many hours does she work each week: _____

8. Father's employment status: At home full time (not employed) Part-time paid employment
Full-time paid employment Other:_____

- What is his job: _____
- How many hours does he work each week: _____

9. Are your parents married to each other? Yes No

If no:

Is your mother (circle one): single (never married) in a first marriage remarried separated
divorced (living single) widowed deceased other_____

Is your father (circle one): single (never married) in a first marriage remarried separated
divorced (living single) widowed deceased other_____

Appendix A-I continued

10. How much education does your mother have (circle one):

- | | |
|------------------------------|-----------------------------|
| Less than 12 years | High school graduate or GED |
| Technical certificate | Some college |
| 2 year college degree | 4 year college degree |
| Some graduate school | Master's degree |
| Doctorate/Medical/Law Degree | |

11. How much education does your father have (circle one):

- | | |
|------------------------------|-----------------------------|
| Less than 12 years | High school graduate or GED |
| Technical certificate | Some college |
| 2 year college degree | 4 year college degree |
| Some graduate school | Master's degree |
| Doctorate/Medical/Law Degree | |

Appendix A-2

IDENTITY STYLE DESCRIPTIONS

Information-oriented style: The adolescent is future oriented, deliberately engaged in self-exploration and decision making. She is actively learning about and expressing herself. The adolescent approaches identity challenges with problem-focused coping strategies, seeking out and evaluating self-relevant information. The adolescent is self-reflective and exhibits a high level of cognitive complexity. Adolescents, who favor this style, want to do their own identity work and take time to elaborate on identity information. Correlates of the information style include: individuated family systems, facilitative anxiety reactions, internal locus of control, need for cognition, openness to ideas, and introspectiveness.

Normative-oriented style: The adolescent is primarily dependent on the views of authorities and significant others for dealing with identity challenges, typically conforming to their expectations, prescriptions, and standards, and thus is predictable in behavior and views. The adolescent seeks social connection and will turn to authorities and significant others for advice and direction when self-relevant stressors are encountered. He is closed to novel identity information and will likely become defensive when core beliefs and values are challenged. The adolescent will even discount information that do not fit internalized prescriptions. Correlates of the normative style include: a rigidly organized self-structure, low level of differentiated family relations, lack of openness to experience.

Diffuse-oriented style: The adolescent avoids self-exploration, often lacking stability and direction, and her self-views are easily changed by the immediate situation. In other words, the adolescent uses situation specific experiences to determine identity and avoids processing challenges to identity. Furthermore, the adolescent will often procrastinate or shun opportunities to engage in identity exploration. Consequently, when receiving identity feedback, the adolescent may respond with apathy or attempts to reduce the emotional distress connected with identity challenges. She prefers to be in-the-moment, and may seem to be open to experience, but her openness is at a superficial level; she is not engaged in deeper processing in terms of self-evaluation. She is chameleon-like in her coping reaction to change and differing situations in which she may find herself, and is reluctant to actually confront personal problems and decisions. Often the adolescent does not take responsibility for her difficulties and tends to blame others for her problems. Correlates of the diffuse style include: external locus of control, debilitating anxiety reactions, lack of introspectiveness, lack of openness to personal feelings.

CURRENT IDENTITY Q-SET

1. When faced with a problem, I put a lot of energy into thinking of possible solutions.
2. I prefer doing things that make me feel better, rather than working a long time to fix a difficult problem.
3. I am someone who likes to gather a lot of information about myself.
4. I often try out different ways of thinking and behaving to learn about myself.
5. I think it's important to do volunteer work that helps other people.
6. How I see myself feels like a roller coaster-changing from day-to-day.
7. Most of the time I feel good about myself.
8. If another person's point of view differs greatly from my own, I work hard to understand how that person sees things.
9. Once I make a decision about myself, I'm not open to new information.
10. What my parents (parent-figures) think I should do is one of the MOST important influences on my life choices.
11. A lot of what influences me in life comes from what my friends think I should do.
12. I consider myself to be someone who is open-minded.
13. Often I feel like my life has little direction or purpose.

Appendix A-2 continued

14. Having self-control is important to me.
15. I take responsibility for my choices and behavior.
16. I really enjoy talking with people who have different values and beliefs than my own.
17. I tend to put decisions off.
18. It is difficult for me to come up with different possibilities for my own life choices.
19. When problems arise, I try to avoid dealing with them if at all possible.
20. My family and friends can pretty much predict how I will behave in different situations.
21. Rather than thinking about who I will be in the future, I prefer to deal with life day to day.
22. My future is something I think about a lot.
23. I don't like it when people question my beliefs.
24. It is more important for me to be connected to members in my family than to anyone else.
25. For me it's important to work hard in school.
26. Earning money is important to me.
27. It is important to me to spend time developing my talents/skills.
28. Having close relationships with my family is important to me.
29. I like to participate in organized groups (e.g., teams, clubs, fellowships).
30. It is important for me to be independent.
31. Having a sense of belonging with other people is a necessary part of my life.
32. Although I consider what other people think, I make the final decision when it comes to important choices about my life.
33. When making decisions, I am inclined to think about what important people in my life believe is right for me.
34. I am pretty good at looking at the possible consequences of my life choices.
35. I tend to seek out novel experiences where I can try out new things and learn about myself.
36. In new situations, I am uncomfortable until I figure out the rules for behavior.
37. I think it is important to respect other people's beliefs and lifestyles.
38. I think boys should behave like boys, and girls should behave like girls.
39. I find that, if I wait long enough to make a decision, the decision will get made for me.
40. I think it's important to be aware of my ethnic background.
41. I am open to the range of possibilities of who I could become.
42. It is important to me to work toward becoming the kind of person that important people in my life can be proud of.
43. I work very hard at really knowing who I am.
44. It's hard for me to explain to other people what's important to me.
45. I am confident about who I am because I know what is most important to my family and friends.
46. I really don't care about making things happen; whatever happens, happens.
47. I watch how others are acting before I decide how to act.
48. Sometimes I brush off information that is not consistent with my beliefs.
49. I am open to questioning my beliefs when I receive information that is different from them.
50. Often my friends and family are surprised at the choices I make.
51. I have ended friendships in the past because I discovered we differed in our core beliefs.
52. The problems I encounter in my life tend to be caused by someone or something else.
53. I'm different people in different situations.
54. When I think about the future, I have specific goals in mind that I am striving for.
55. I am not concerned with finding out who I am right now.
56. Being part of a group of friends is important to me.
57. It is important to me to save money.
58. Having a job is important to me.
59. It is important to me to have at least one close friend.
60. Having a romantic partner is important to me.

Appendix A-3

Below you will find a number of statements about beliefs, attitudes, and/or ways of dealing with issues. Read each carefully, then use it to describe yourself and circle the number that indicates the extent to which you think the statement represents you. There are no right or wrong answers. For instance, if the statement is very much like you, mark a 5, it is not like you at all, mark a 1. Use the 1 to 5 point scale to indicate the degree to which each statement is uncharacteristic (1) or characteristic (5) of yourself.

	Not At All Like Me			Very Much Like Me	
	a	b	c	d	e
1. Regarding religious beliefs, I know basically what I believe and don't believe	a	b	c	d	e
2. I've spent a great deal of time thinking seriously about what I should do with my life.	a	b	c	d	e
3. I'm not really sure what I'm doing in school/my job; I guess things will work themselves out.	a	b	c	d	e
4. I've more-or-less always operated according to the values with which I was brought up.	a	b	c	d	e
5. I've spent a good deal of time reading and talking to others about religious ideas.	a	b	c	d	e
6. When I discuss an issue with someone, I try to assume their point of view and see the problem from their perspective.	a	b	c	d	e
7. I know what I want to do with my future.	a	b	c	d	e
8. It doesn't pay to worry about values in advance, I decide things as they happen.	a	b	c	d	e
9. I'm not really sure what I believe about religion.	a	b	c	d	e
10. I've always had purpose in my life; I was brought up to know what to strive for.	a	b	c	d	e
11. I'm not sure which values I really hold.	a	b	c	d	e
12. I have some consistent political views; I have a definite stand on where the government and country should be headed.	a	b	c	d	e

Appendix A-3 continued

	Not At All Like Me			Very Much Like Me	
13. Many times by not concerning myself with personal problems, they work themselves out.	a	b	c	d	e
14. I'm not sure what I want to do in the future.	a	b	c	d	e
15. I'm really into my major/job; it's the academic/career area that is right for me.	a	b	c	d	e
16. I've spent a lot of time reading and trying to make sense out of political issues.	a	b	c	d	e
17. I'm not really thinking about my future now; it's still a long way off.	a	b	c	d	e
18. I've spent a lot of time and talked with a lot of people trying to develop a set of values that make sense to me.	a	b	c	d	e
19. Regarding religion, I've always known what I believe and don't believe; I never really had any serious doubts.	a	b	c	d	e
20. I'm not sure what I should major in/have a career in.	a	b	c	d	e
21. I've known since high school that I was going to college and what I was going to major in.	a	b	c	d	e
22. I have a definite set of values that I use in order to make personal decisions.	a	b	c	d	e
23. I think it's better to have a firm set of beliefs than to be open-minded.	a	b	c	d	e
24. When I try to make a decision, I try to wait as long as possible in order to see what will happen.	a	b	c	d	e
25. When I have a personal problem, I try to analyze the situation in order to understand it.	a	b	c	d	e
26. I find it's best to seek out advice from professions (clergy, doctors, lawyers) when I have a problem.	a	b	c	d	e
27. It's best for me not to take life too seriously; I just try to enjoy it.	a	b	c	d	e

Appendix A-3 continued

	Not At All Like Me			Very Much Like Me	
28. I think it's better to have fixed values, than to consider alternative value systems.	a	b	c	d	e
29. I try not to think about or deal with problems as long as I can.	a	b	c	d	e
30. I find that personal problems often turn out to be interesting challenges.	a	b	c	d	e
31. I try to avoid personal situations that will require me to think a lot, and deal with them on my own.	a	b	c	d	e
32. Once I know the correct way to handle a problem, I prefer to stick with it.	a	b	c	d	e
33. When I have to make a decision, I like to spend a lot of time thinking about my options.	a	b	c	d	e
34. I prefer to deal with situations where I can rely on social norms and standards.	a	b	c	d	e
35. I like to have the responsibility for handling problems in my life that require me to think on my own.	a	b	c	d	e
36. Sometimes I refuse to believe a problem will happen, and things manage to work themselves out.	a	b	c	d	e
37. When making important decisions, I like to have as much information as possible.	a	b	c	d	e
38. When I know a situation is going to cause me stress, I try to avoid it.	a	b	c	d	e
39. To live a complete life, I think people need to get emotionally involved and commit themselves to specific values and ideas.	a	b	c	d	e
40. I find it's best for me to rely on the advice of close friends or relatives when I have a problem.	a	b	c	d	e

Appendix A-4

Think about who you are as a family member	Not at all	Totally
1. In this area, I would like to have as much information as possible and spend a lot of time thinking about it ----- a	b	c d e
2. I prefer to deal with situations on the advice of significant others (e.g., parents, relatives, spouse, religious leaders) in this area ----- a	b	c d e
3. When I have to make decisions in this area, I wait for them to work out by themselves and don't give them much thought. ----- a	b	c d e
Think about who you are as a friend		
4. In this area, I would like to have as much information as possible and spend a lot of time thinking about it ----- a	b	c d e
5. I prefer to deal with situations on the advice of significant others (e.g., parents, relatives, spouse, religious leaders) in this area ----- a	b	c d e
6. When I have to make decisions in this area, I wait for them to work out by themselves and don't give them much thought. ----- a	b	c d e
Think about who you are as a dating partner		
7. In this area, I would like to have as much information as possible and spend a lot of time thinking about it ----- a	b	c d e
8. I prefer to deal with situations on the advice of significant others (e.g., parents, relatives, spouse, religious leaders) in this area ----- a	b	c d e
9. When I have to make decisions in this area, I wait for them to work out by themselves and don't give them much thought. ----- a	b	c d e
Think about who you are in terms of religious belief,		
10. In this area, I would like to have as much information as possible and spend a lot of time thinking about it ----- a	b	c d e
11. I prefer to deal with situations on the advice of significant others (e.g., parents, relatives, spouse, religious leaders) in this area ----- a	b	c d e
12. When I have to make decisions in this area, I wait for them to work out by themselves and don't give them much thought. ----- a	b	c d e
Think about who you are in terms of political views,		
13. In this area, I would like to have as much information as possible and spend a lot of time thinking about it ----- a	b	c d e
14. I prefer to deal with situations on the advice of significant others (e.g., parents, relatives, spouse, religious leaders) in this area ----- a	b	c d e
15. When I have to make decisions in this area, I wait for them to work out by themselves and don't give them much thought. ----- a	b	c d e

Appendix A-4 continued

	Not at all				Totally
Think about who you are in terms of your major and future career,					
16. In this area, I would like to have as much information as possible and spend a lot of time thinking about it -----	a	b	c	d	e
17. I prefer to deal with situations on the advice of significant others (e.g., parents, relatives, spouse, religious leaders) in this area -----	a	b	c	d	e
18. When I have to make decisions in this area, I wait for them to work out by themselves and don't give them much thought. -----	a	b	c	d	e
Think about who you are in terms of recreation and leisure interests,					
19. In this area, I would like to have as much information as possible and spend a lot of time thinking about it -----	a	b	c	d	e
20. I prefer to deal with situations on the advice of significant others (e.g., parents, relatives, spouse, religious leaders) in this area -----	a	b	c	d	e
21. When I have to make decisions in this area, I wait for them to work out by themselves and don't give them much thought. -----	a	b	c	d	e

Appendix A-5

Rank these areas in terms of how well they reflect who you are. For example, if your political views reflect you best, that receives a rank of 1, if your family is the area that reflects your second best, it should receive a rank of 2, and so forth.

- _____ a. your family
- _____ b. your dating partner/ relationship
- _____ c. you religious beliefs
- _____ d. your political views
- _____ e. your major in college/ future career
- _____ f. your recreation or leisure interests.
- _____ g. your friends

Appendix A-6

Rate the extent to which each response is true for you.	not at all	neutral	totally	
When you think of yourself, what do you feel generally?				
1. I feel really alive	a	b	c	d e
2. I feel intensely involved	a	b	c	d e
3. I feel that I am really being myself	a	b	c	d e
4. I feel like I'm doing what I was meant to do	a	b	c	d e
5. I feel complete or fulfilled	a	b	c	d e
6. I feel like things really come together; they fit	a	b	c	d e
What do you feel when you engage in activities with your family?				
7. I feel really alive	a	b	c	d e
8. I feel intensely involved	a	b	c	d e
9. I feel that I am really being myself	a	b	c	d e
10. I feel like I'm doing what I was meant to do	a	b	c	d e
11. I feel complete or fulfilled	a	b	c	d e
12. I feel like things really come together; they fit	a	b	c	d e
What do you feel when you engage in activities with your friends?				
13. I feel really alive	a	b	c	d e
14. I feel intensely involved	a	b	c	d e
15. I feel that I am really being myself	a	b	c	d e
16. I feel like I'm doing what I was meant to do	a	b	c	d e
17. I feel complete or fulfilled	a	b	c	d e
18. I feel like things really come together; they fit	a	b	c	d e
What do you feel when you engage in activities with your dating partner?				
19. I feel really alive	a	b	c	d e
20. I feel intensely involved	a	b	c	d e
21. I feel that I am really being myself	a	b	c	d e
22. I feel like I'm doing what I was meant to do	a	b	c	d e
23. I feel complete or fulfilled	a	b	c	d e
24. I feel like things really come together; they fit	a	b	c	d e
What do you feel when you engage in activities related to religion?				
25. I feel really alive	a	b	c	d e
26. I feel intensely involved	a	b	c	d e
27. I feel that I am really being myself	a	b	c	d e
28. I feel like I'm doing what I was meant to do	a	b	c	d e
29. I feel complete or fulfilled	a	b	c	d e
30. I feel like things really come together; they fit	a	b	c	d e

Appendix A-6 continued

	Not at all			Totally
What do you feel when you engage in activities related to your political views?				
31. I feel really alive	a	b	c	d e
32. I feel intensely involved	a	b	c	d e
33. I feel that I am really being myself	a	b	c	d e
34. I feel like I'm doing what I was meant to do	a	b	c	d e
35. I feel complete or fulfilled	a	b	c	d e
36. I feel like things really come together; they fit	a	b	c	d e
What do you feel when you engage in activities related to your major and future career?				
37. I feel really alive	a	b	c	d e
38. I feel intensely involved	a	b	c	d e
39. I feel that I am really being myself	a	b	c	d e
40. I feel like I'm doing what I was meant to do	a	b	c	d e
41. I feel complete or fulfilled	a	b	c	d e
42. I feel like things really come together; they fit	a	b	c	d e
What do you feel when you engage in activities of recreation and leisure?				
43. I feel really alive	a	b	c	d e
44. I feel intensely involved	a	b	c	d e
45. I feel that I am really being myself	a	b	c	d e
46. I feel like I'm doing what I was meant to do	a	b	c	d e
47. I feel complete or fulfilled	a	b	c	d e
48. I feel like things really come together; they fit	a	b	c	d e

Appendix A-7

The following set of questions deals with how you feel about yourself and your life. Please remember that there are no right or wrong answers.

Circle the number that best describes your present agreement or disagreement with each statement.	Strongly Disagree	Disagree Somewhat	Disagree Slightly	Agree Slightly	Agree Somewhat	Strongly Agree
1. Most people see me as loving and affectionate.	1	2	3	4	5	6
2. Sometimes I change the way I act or think to be more like those around me.	1	2	3	4	5	6
3. In general, I feel I am in charge of the situation in which I live.	1	2	3	4	5	6
4. I am not interested in activities that will expand my horizons.	1	2	3	4	5	6
5. I feel good when I think of what I've done in the past and what I hope to do in the future.	1	2	3	4	5	6
6. When I look at the story of my life, I am pleased with how things have turned out.	1	2	3	4	5	6
7. Maintaining close relationships has been difficult and frustrating for me.	1	2	3	4	5	6
8. I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.	1	2	3	4	5	6
9. The demands of everyday life often get me down.	1	2	3	4	5	6
10. In general, I feel that I continue to learn more about myself as time goes by.	1	2	3	4	5	6
11. I live life one day at a time and don't really think about the future.	1	2	3	4	5	6
12. In general, I feel confident and positive about myself.	1	2	3	4	5	6
13. I often feel lonely because I have few close friends with whom to share my concerns.	1	2	3	4	5	6
14. My decisions are not usually influenced by what everyone else is doing.	1	2	3	4	5	6

Appendix A-7 continued

Circle the number that best describes your present agreement or disagreement with each statement.	Strongly Disagree	Disagree Somewhat	Disagree Slightly	Agree Slightly	Agree Somewhat	Strongly Agree
15. I do not fit very well with the people and the community around me.	1	2	3	4	5	6
16. I am the kind of person who likes to give new things a try.	1	2	3	4	5	6
17. I tend to focus on the present, because the future nearly always brings me problems.	1	2	3	4	5	6
18. I feel like many of the people I know have gotten more out of life than I have.	1	2	3	4	5	6
19. I enjoy personal and mutual conversations with family members or friends.	1	2	3	4	5	6
20. I tend to worry about what other people think of me.	1	2	3	4	5	6
21. I am quite good at managing the many responsibilities of my daily life.	1	2	3	4	5	6
22. I don't want to try new ways of doing things - my life is fine the way it is.	1	2	3	4	5	6
23. I have a sense of direction and purpose in life.	1	2	3	4	5	6
24. Given the opportunity, there are many things about myself that I would change.	1	2	3	4	5	6
25. It is important to me to be a good listener when close friends talk to me about their problems.	1	2	3	4	5	6
26. Being happy with myself is more important to me than having others approve of me.	1	2	3	4	5	6
27. I often feel overwhelmed by my responsibilities.	1	2	3	4	5	6
28. I think it is important to have new experiences that challenge how you think about yourself and the world.	1	2	3	4	5	6
29. My daily activities often seem trivial and unimportant to me.	1	2	3	4	5	6
30. I like most aspects of my personality.	1	2	3	4	5	6
31. I don't have many people who want to listen when I need to talk.	1	2	3	4	5	6

Appendix A-7 continued

Circle the number that best describes your present agreement or disagreement with each statement.	Strongly Disagree	Disagree Somewhat	Disagree Slightly	Agree Slightly	Agree Somewhat	Strongly Agree
32. I tend to be influenced by people with strong opinions.	1	2	3	4	5	6
33. If I were unhappy with my living situation, I would take effective steps to change it.	1	2	3	4	5	6
34. When I think about it, I haven't really improved much as a person over the years.	1	2	3	4	5	6
35. I don't have a good sense of what it is I'm trying to accomplish in life.	1	2	3	4	5	6
36. I made some mistakes in the past, but I feel that all in all everything has worked out for the best.	1	2	3	4	5	6
37. I feel like I get a lot out of my friendships.	1	2	3	4	5	6
38. People rarely talk to me into doing things I don't want to do.	1	2	3	4	5	6
39. I generally do a good job of taking care of my personal finances and affairs.	1	2	3	4	5	6
40. In my view, people of every age are able to continue growing and developing.	1	2	3	4	5	6
41. I used to set goals for myself, but that now seems like a waste of time.	1	2	3	4	5	6
42. In many ways, I feel disappointed about my achievements in life.	1	2	3	4	5	6
43. It seems to me that most other people have more friends than I do.	1	2	3	4	5	6
44. It is more important to me to "fit in" with others than to stand alone on my principles.	1	2	3	4	5	6
45. I find it stressful that I can't keep up with all of the things I have to do each day.	1	2	3	4	5	6
46. With time, I have gained a lot of insight about life that has made me a stronger, more capable person.	1	2	3	4	5	6
47. I enjoy making plans for the future and working to make them a reality.	1	2	3	4	5	6
48. For the most part, I am proud of who I am and the life I lead.	1	2	3	4	5	6

Circle the number that best describes your present agreement or disagreement with each statement.	Strongly Disagree	Disagree Somewhat	Disagree Slightly	Agree Slightly	Agree Somewhat	Strongly Agree
49. People would describe me as a giving person, willing to share my time with others.	1	2	3	4	5	6
50. I have confidence in my opinions, even if they are contrary to the general consensus.	1	2	3	4	5	6
51. I am good at juggling my time so that I can fit everything in that needs to be done.	1	2	3	4	5	6
52. I have a sense that I have developed a lot as a person over time.	1	2	3	4	5	6
53. I am an active person in carrying out the plans I set for myself.	1	2	3	4	5	6
54. I envy many people for the lives they lead.	1	2	3	4	5	6
55. I have not experienced many warm and trusting relationships with others.	1	2	3	4	5	6
56. It's difficult for me to voice my own opinions on controversial matters.	1	2	3	4	5	6
57. My daily life is busy, but I derive a sense of satisfaction from keeping up with everything.	1	2	3	4	5	6
58. I do not enjoy being in new situations that require me to change my old familiar ways of doing things.	1	2	3	4	5	6
59. Some people wander aimlessly through life, but I am not one of them.	1	2	3	4	5	6
60. My attitude about myself is probably not as positive as most people feel about themselves.	1	2	3	4	5	6
61. I often feel as if I'm on the outside looking in when it comes to friendships.	1	2	3	4	5	6
62. I often change my mind about decisions if my friends or family disagree.	1	2	3	4	5	6
63. I get frustrated when trying to plan my daily activities because I never accomplish the things I set out to do.	1	2	3	4	5	6
64. For me, life has been a continuous Process of learning, changing, and growth.	1	2	3	4	5	6

Appendix A-7 continued

Circle the number that best describes your present agreement or disagreement with each statement.	Strongly Disagree	Disagree Somewhat	Disagree Slightly	Agree Slightly	Agree Somewhat	Strongly Agree
65. I sometimes feel as if I've done all there is to do in life.	1	2	3	4	5	6
66. Many days I wake up feeling discouraged about how I have lived my life.	1	2	3	4	5	6
67. I know that I can trust my friends, and they know they can trust me.	1	2	3	4	5	6
68. I am not the kind of person who gives in to social pressures to think or act in certain ways.	1	2	3	4	5	6
69. My efforts to find the kinds of activities and relationships that I need have been quite successful.	1	2	3	4	5	6
70. I enjoy seeing how my views have changed and matured over the years.	1	2	3	4	5	6
71. My aims in life have been more a source of satisfaction than frustration to me.	1	2	3	4	5	6
72. The past had its ups and downs, but in general, I wouldn't want to change it.	1	2	3	4	5	6
73. I find it difficult to really open up when I talk with others.	1	2	3	4	5	6
74. I am concerned about how other people evaluate the choices I have made in my life.	1	2	3	4	5	6
75. I have difficulty arranging my life in a way that is satisfying to me.	1	2	3	4	5	6
76. I gave up trying to make big improvements or changes in my life a long time ago.	1	2	3	4	5	6
77. I find it satisfying to think about what I have accomplished in life.	1	2	3	4	5	6
78. When I compare myself to friends and acquaintances, it makes me feel good about who I am.	1	2	3	4	5	6
79. My friends and I sympathize with each other's problems.	1	2	3	4	5	6
80. I judge myself by what I think is important, not by the values of what others think is important.	1	2	3	4	5	6

Appendix A-7 continued

Circle the number that best describes your present agreement or disagreement with each statement.	Strongly Disagree	Disagree Somewhat	Disagree Slightly	Agree Slightly	Agree Somewhat	Strongly Agree
I have been able to build a home for myself that is my liking.	1	2	3	4	5	6
82. There is truth to the saying that you can't teach an old dog new tricks.	1	2	3	4	5	6
In the final analysis, I'm not sure that my life adds up to much.	1	2	3	4	5	6
84. Everyone has their weaknesses, but I seem to have more than my share.	1	2	3	4	5	6

APPENDIX B

Appendix B-1

<i>Cluster Standard</i>							
Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
Informational dominate0d	Normative dominated	Diffuse dominated	Informational & Normative dominated	Normative & Diffuse dominated	Informational & Diffuse dominated	No dominated style	All dominated
Informational 4	Informational 1.5	Informational 1.5	Informational 4	Informational 1.5	Informational 4	Informational 1.5	Informational 4
Normative1.5	Normative 4	Normative1.5	Normative 4	Normative 4	Normative1.5	Normative1.5	Normative 4
Diffuse 1.5	Diffuse 1.5	Diffuse 4	Diffuse 1.5	Diffuse 4	Diffuse 4	Diffuse 1.5	Diffuse 4

Appendix B-2

Change in Clusters between Half and Whole Sample

Domain: Family				
Group	1 st		2 nd	Total
Center	Half		Half	480
1	14		7	30
I 4.03				
N 1.77				
D 1.53				
2	11	7 (64%) moved to group 7 in total	1	8
I 1.63				
N 2.88				
D 1.38				
3	14	5 (36%) moved to group 5 in total, 6 (43%) moved to group 6 in total	9	12
I 2.00				
N 1.50				
D 3.75				
4	102		101	203
I 4.63				
N 3.56				
D 1.61				
5	12		16	35
I 2.77				
N 3.71				
D 3.66				
6	33	11 (33%) moved to group 8 in total	32	58
I 3.90				
N 2.31				
D 3.45				
7	10	6 (60%) moved to group 1 in total, 1 (10%) moved to group 2 in total, 1 (10%) moved to group 6 in total	20	24
I 3.00				
N 3.58				
D 1.67				
8	50		59	121
I 4.74				
N 4.07				
D 3.50				

Table continues on next page

Appendix B-2 (continued)

Change in Clusters between Half and Whole Sample

Domain: Friends

Group Center	1 st Half	% moved in total number	2 nd Half	% moved in total number	Total
1	38		24		62
N 1.91					
I 3.27					
D 1.55					
2	16		9		30
N 3.87					
I 1.60					
D 2.67					
3	4		6		11
N 1.68					
I 1.48					
D 4.56					
4	103		18		231
N 3.58					
I 3.58					
D 2.64					
5	21		12	1 (8%) moved to group 3 in total	33
N 3.81					
I 1.48					
D 4.49					
6	24		17		45
N 1.96					
I 3.42					
D 3.96					
7	10		14	5 (36%) moved to group 2 in total; 1 (7%) moved to group 6 in total	18
N 1.78					
I 1.61					
D 2.61					
8	29		36	1 (3%) moved to group 5 in total; 3 (8%) moved to group 6 in total	61
N 4.26					
I 3.48					
D 4.54					

Table continues on next page

Appendix B-2 (continued)

Change in Clusters between Half and Whole Sample

Domain: Dating

Group	1 st Half 240	% moved in total number	2 nd Half 240	% moved in total number	Total 480
1 D 1.32 N 1.57 I 4.24	39		31		75
2 D 1.69 N 4.03 I 2.82	23	2 (9%) moved to group 7 in total; 1 (4%) moved to group 8 in total	24	10 (42%) moved to group 4 in total	39
3 D 3.70 N 1.70 I 1.70	3		7		10
4 D 1.35 N 3.85 I 4.58	132		104		246
5 D 3.50 N 3.67 I 1.50	5	4 (80%) moved to group 8 in total	5		6
6 D 3.68 N 1.63 I 3.92	17		21		38
7 D 1.63 N 1.88 I 1.25	3		13	5 (38%) moved to group 1 in total; 5 (38%) moved to group 2 in total	8
8 D 3.55 N 3.77 I 4.10	24		40		69

Table continues on next page

Appendix B-2 (continued)

Change in Clusters between Half and Whole Sample

Domain: Religious Beliefs

Group	1 st Half	% moved in total	2 nd Half	% moved in total	Total
Center	240	number	240	number	480
1	29	4 (14%) moved	5	1 (20%) moved to	49
I 4.12		to group 6 in		group 6 in total	
N 2.80		total			
D 1.55					
2	17		42	2 (5%) moved to	57
I 2.42				group 1 in total	
N 4.32					
D 1.33					
3	10		5		17
I 1.59					
N 1.53					
D 5.00					
4	91		107	18 (17%) moved to	180
I 4.57				group 1 in total	
N 4.51					
D 1.33					
5	15	1 (7%) moved to	28	1 (4%) moved to	61
I 2.49		group 7 in total		group 3 in total	
N 3.80					
D 3.62					
6	20	1 (5%) moved to	18		42
I 3.95		group 3 in total			
N 1.62					
D 3.31					
7	7		5		13
I 1.23					
N 1.69					
D 1.54					
8	56	20 (36%) moved	36		72
I 4.40		to group 5 in			
N 4.01		total			
D 3.63					

Table continues on next page

Appendix B-2 (continued)

Change in Clusters between Half and Whole Sample

Domain: Political Beliefs

Group	1 st Half	% moved in total	2 nd Half	% moved in total	Total
Center	240	number	240	number	480
1	28		21		49
N 1.49					
D 1.37					
I 4.22					
2	23	1 (4%) moved to group 4 in total	40		81
N 3.81					
D 2.53					
I 2.72					
3	11	1 (9%) moved to group 2 in total	13		26
N 2.04					
D 4.31					
I 1.65					
4	54		63		118
N 4.10					
D 1.52					
I 4.49					
5	23	1 (4%) moved to group 2 in total	40	3 (8%) moved to group 3 in total	70
N 4.27					
D 4.34					
I 2.67					
6	13		26	8 (31%) moved to group 8 in total	31
N 1.65					
D 3.45					
I 3.90					
7	7		4		11
N 2.00					
D 1.18					
I 1.27					
8	87	17 (20%) moved to group 2 in total; 10 (11%) moved to group 5 in total	38	1 (3%) moved to group 5 in total	105
N 4.21					
D 3.52					
I 4.44					

Table continues on next page

Appendix B-2 (continued)

Change in Clusters between Half and Whole Sample

Domain: Major / Future Career

Group Center	1 st Half 245	% moved in total number	2 nd Half 246	% moved in total number	Total 491
1 D 1.34 N 1.66 I 4.64	71	1 moved to group 6 (1%)	84		154
2 D 1.63 N 3.57 I 2.70	21	8 moved to group 7 (38%)	16		30
3 D 3.89 N 1.78 I 1.44	7		6	5 moved to group 6 (83%)	9
4 D 1.43 N 3.52 I 4.58	88	1 moved to group 2 (1%)	83		170
5 D 3.46 N 3.46 I 2.57	17	1 moved to group 3 (6%), 1 moved to group 6 (6%)	13		28
6 D 3.61 N 1.68 I 3.79	9	1 moved to group 7 (11%)	12		28
7 D 1.50 N 1.62 I 2.65	6		11		26
8 D 3.48 N 3.74 I 4.41	26	1 moved to group 6 (4%)	21		46

Table continues on next page

Appendix B-2 (continued)

Change in Clusters between Half and Whole Sample

Domain: Recreation

Group	1 st Half 240	% moved in total number	2 nd Half 240	% moved in total number	Total 480
1 I 4.40 D 1.49 N 1.55	55		48		104
2 I 1.25 D 1.50 N 3.50	1		3		4
3 I 2.50 D 4.19 N 1.54	28	1 moved to group 6 (4%)	15	1 moved to group 7 (7%)	54
4 I 4.42 D 1.58 N 3.52	44		50		96
5 I 1.80 D 3.60 N 3.62	20	2 moved to group 4 (10%), 12 moved to group 8 (60%)	9		15
6 I 4.17 D 3.28 N 1.47	62		63	12 moved to group 3 (19%)	114
7 I 1.42 D 1.58 N 1.33	3		8		12
8 I 3.97 D 3.41 N 3.53	32		49	1 moved to group 3 (2%)	92

Appendix B-3

Description of Cluster Analysis

Distance of Case from its Classification Cluster Center							
	Family	Friends	Dating partner	Religion	Political belief	Career	Recreation
N	480	480	480	480	480	480	480
Mean	.95	.95	1.03	.98	1.05	.92	1.01
Std. Deviation	.30	.28	.32	.32	.32	.28	.35
Minimum	.50	.43	.36	.49	.33	.51	.58
Maximum	1.87	2.12	2.10	2.36	2.14	2.21	2.40

Appendix B-4

Correlations among Different Measures of Hierarchical Identity Structure

Family

	1	2	3	4
1. first time meet--family	-	.39**	.47**	.24**
2. how much things about family reflect who you are?		-	.38**	.31**
3. how would you like to spend a free weekend? with family (rank)			-	.27**
4. times that family were chosen in all the relevant pairs				-

* $p < .05$. ** $p < .01$

Dating partner

	1	2	3	4
1. first time meet-dating partner	-	.61**	.66**	.43**
2. how much things about dating partner/relationship reflect who you are?		-	.55**	.40**
3. how would you like to spend a free weekend? with dating partner (rank)			-	.46**
4. times that dating partner were chosen in all the relevant pairs				-

* $p < .05$. ** $p < .01$

Religious beliefs

	1	2	3	4
1. First time meet-religious beliefs	-	.65**	.74**	.51**
2. How much things about religious belief reflect who you are?		-	.55**	.47**
3. How would you like to spend a free weekend? in religious activities (rank)			-	.50**
4. Times that religion were chosen in all the relevant pairs				-

* $p < .05$. ** $p < .01$

Political beliefs

	1	2	3	4
1. First time meet-political views	-	.51**	.59**	.44**
2. How much things about political views reflect who you are?		-	.38**	.40**
3. How would you like to spend a free weekend? in political activities (rank)			-	.40**
4. Times that political view were chosen in all the relevant pairs				-

* $p < .05$. ** $p < .01$

Appendix B-4 (continued)

Correlations among Different Measures of Hierarchical Identity Structure

Career	1	2	3	4
1. First time meet-college major/career	-	.35**	.31**	.29**
2. How much things about college major/future career reflect who you are?		-	.11*	.15**
3. How would you like to spend a free weekend? work in school activities related to school/job/career (rank)			-	.21**
4. Times that career were chosen in all the relevant pairs				-

* $p < .05$. ** $p < .01$

Recreation

	1	2	3	4
1. First time meet-recreation	-	.36**	.45**	.31**
2. How much things about recreation/leisure interests reflect who you are?		-	.27**	.15**
3. How would you like to spend a free weekend? in recreation/leisure activities (rank)			-	.27**
4. Times that recreation were chosen in all the relevant pairs				-

* $p < .05$. ** $p < .01$

Friends

	1	2	3	4
1. First time meet-friends	-	.43**	.54**	.34**
2. How much things about friends reflect who you are?		-	.27**	.18**
3. How would you like to spend a free weekend? with friends (rank)			-	.30**
4. Times that friends were chosen in all the relevant pairs				-

* $p < .05$. ** $p < .01$

Appendix B-5

Saliience Level of Each Domain

Saliience level	Family			Dating partner			Religious beliefs			Political beliefs		
	total	male	female	total	male	female	total	male	female	total	male	female
1 st	23.5	14.6	29.2	8.5	7.6	9.2	16.0	13.5	17.6	.4	0	0.7
2 nd	36.7	29.2	41.4	12.1	13.5	11.2	9.8	10.8	9.2	2.1	3.2	1.4
3 rd	18.8	23.2	15.9	17.7	15.7	19.0	8.5	9.7	7.8	1.9	2.7	1.4
4 th	11.0	18.4	6.4	14.4	14.1	14.6	13.5	15.7	12.2	4.4	6.5	3.1
5 th	4.8	8.1	2.7	17.3	15.7	18.3	13.5	9.2	16.3	9.6	14.1	6.8
6 th	4.6	5.4	4.1	13.8	15.1	12.9	25.8	24.9	26.4	21.3	24.3	19.3
7 th	.6	1.1	0.3	16.3	18.4	14.9	12.7	16.2	10.5	60.4	49.2	67.5

Saliience level	Major/future career			recreation			Friends		
	total	male	female	total	male	female	total	male	female
1 st	27.5	25.4	28.8	19.4	35.1	9.5	4.6	3.8	5.1
2 nd	10.6	8.6	11.9	10.6	15.1	7.8	18.1	19.5	17.3
3 rd	16.7	15.7	17.3	12.3	10.3	13.6	24.0	22.2	25.1
4 th	18.8	16.2	20.3	15.0	9.7	18.3	22.7	18.9	25.1
5 th	17.9	21.1	15.9	17.9	10.3	22.7	19.2	22.2	17.3
6 th	7.1	9.7	5.4	20.0	13.0	24.4	7.7	8.1	7.5
7 th	1.5	3.2	0.3	4.8	6.5	3.7	3.8	5.4	2.7

Note: The values represent mean percentages of individuals' answers.

Appendix B-6

Post hoc Testing Interactions between Global Identity Style and Gender in Predicting Well-being

1 Personal growth: Gender by informational style										
Estimates of Moderated Slopes @ Diff Levels of Moderator					Standard error of slope					t-value
Moderator=V1 Moderated=V2 V1 V2	b of V2	b of V1*V2	V1 Values	b of V2 @ V1	Var of slope of V2	Var of slope of V1*V2	Cov of slopes V2 & V1*V2	Standard Error	bi@X_ S.E.	
Gender	Info. style	1.575	-.339	-1.0000	1.914	.014	.014	-.001	0.17320508	11.050484
Gender	Info. style	1.575	-.339	1.0000	1.236	.014	.014	-.001	0.16124516	7.6653466

1 Personal Growth: Gender by Diffuse style										
Estimates of Moderated Slopes @ Diff Levels of Moderator					Standard error of slope					t-value
Moderator=V1 Moderated=V2 V1 V2	b of V2	b of V1*V2	V1 Values	b of V2 @ V1	Var of slope of V2	Var of slope of V1*V2	Cov of slopes V2 & V1*V2	Standard Error	bi@X_ S.E.	
Gender	Diff style	-1.359	.308	-1.0000	-1.667	.016	.016	-.002	0.18973666	-8.785861
Gender	Diff style	-1.359	.308	1.0000	-1.051	.016	.016	-.002	0.16733201	-6.280926

Appendix B-7

Post hoc Testing Interaction between Consistency of Identity Style and Gender in Predicting Well-being

1 Positive relations with others: Gender by Diffuse style consistency										
Estimates of Moderated Slopes @ Diff Levels of Moderator					Standard error of slope					t-value
Moderator=V1 Moderated=V2 V1 V2		b of V2	b of V1*V2	V1 Values	b of V2 @ V1	Var of slope of V2	Var of slope of V1*V2	Cov of slopes V2 & V1*V2	Standard Error	bi@X_ S.E.
Gender	Diff style	-.115	.071	-1.0000	-0.186	0.0004347234 222023	0.00043472342 22023	-6.613E-05	0.03165	-5.87682
Gender	Diff style	-.115	.071	1.0000	-0.044	0.0004347234 222023	0.00043472342 22023	-6.613E-05	0.027151	-1.62056

1 Purpose in life: Gender by diffuse style consistency										
Estimates of Moderated Slopes @ Diff Levels of Moderator					Standard error of slope					t-value
Moderator=V1 Moderated=V2 V1 V2		b of V2	b of V1*V2	V1 Values	b of V2 @ V1	Var of slope of V2	Var of slope of V1*V2	Cov of slopes V2 & V1*V2	Standard Error	bi@X_ S.E.
Gender	Diff style	-.145	.049	-1.0000	-0.194	0.00033669 03600891	0.000336690360 0891	-5.122E-05	0.027854	-6.965
Gender	Diff style	-.145	.049	1.0000	-0.096	0.00033669 03600891	0.000336690360 0891	-5.122E-05	0.023894	-4.01768

Appendix B-8

Post hoc Testing Interaction between identity style and structure in predicting well-being

1 Autonomy: Structure by informational style										
Estimates of Moderated Slopes @ Diff Levels of Moderator					Standard error of slope				t-value	
Moderator=V1 Moderated=V2 V1 V2		b of V2	b of V1*V2	V1 Values	b of V2 @ V1	Var of slope of V2	Var of slope of V1*V2	Cov of slopes V2 & V1*V2	Standard Error	bi@X S.E.
Structure	Info. style	1.33	-.123	2.2419	1.05425	.021	.004	.001	0.2135127	4.937646
Structure	Info. style	1.33	-.123	-2.2419	1.60575	.021	.004	.001	0.191364	8.391076

1 Autonomy: Structure by normative style										
Estimates of Moderated Slopes @ Diff Levels of Moderator					Standard error of slope				t-value	
Moderator=V1 Moderated=V2 V1 V2		b of V2	b of V1*V2	V1 Values	b of V2 @ V1	Var of slope of V2	Var of slope of V1*V2	Cov of slopes V2 & V1*V2	Standard Error	bi@X S.E.
Structure	Norm. style	-.962	.178	2.2419	-0.56295	.022	.005	.000	0.2170942	-2.5931
Structure	Norm. style	-.962	.178	-2.2419	-1.36105	.022	.005	.000	0.2170942	-6.26941

1 Autonomy: Structure by diffuse style										
Estimates of Moderated Slopes @ Diff Levels of Moderator					Standard error of slope				t-value	
Moderator=V1 Moderated=V2 V1 V2		b of V2	b of V1*V2	V1 Values	b of V2 @ V1	Var of slope of V2	Var of slope of V1*V2	Cov of slopes V2 & V1*V2	Standard Error	bi@X S.E.
Structure	Diff style	-1.325	.133	2.2419	-1.02683	.022	.004	.001	0.2158418	-4.75733
Structure	Diff style	-1.325	.133	-2.2419	-1.62317	.022	.004	.001	0.1939592	-8.36861