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Identity Development and Careers in Adolescents and Emerging Adults: Content, Process, and Structure

Erik J. Porfeli, Bora Lee and Fred W. Vondracek

Vocational identity is an important construct in a number of career theories. In examining the history of vocational identity in career theory, it is readily apparent that it is linked with the history of the conceptually closely related construct of self-concept. Moreover, some prominent early theorists did not view self-concept and identity as independent constructs. For example, Super conceptualized *identification* as part of the process of self-concept formation, and while he did not explicitly incorporate the construct of vocational identity into his theory, he believed that “identifying with” or “matching” oneself against individuals in certain occupations was the process that would lead to occupational choice (Super, 1963). Tiedeman and his colleagues viewed self-concept and identity formation as part of the organized patterns of psychological functioning that interacted reciprocally with occupational behavior and the development of work roles (e.g., Dudley and Tiedeman, 1977; O’Hara and Tiedeman, 1959; Peatling and Tiedeman, 1977; Tiedeman and O’Hara, 1963)

Erik Erikson (1959, 1968) is generally acknowledged as the intellectual father of current conceptions of identity in developmental and vocational psychology. Although he did not explicitly define vocational identity apart from identity in general, he called attention to the central role of vocational choice with his often-cited declaration that “in general it is primarily the inability to settle on an occupational identity which disturbs young people” (Erikson, 1959, p. 92). Throughout his voluminous writings, Erikson speculated about the epigenetic processes involved in the formation of identity, but he did little to operationalize his conception of identity and of the underlying exploration and commitment processes, undoubtedly in part because he had little interest in doing empirical research. A significant impetus to empirical research came from Marcia’s (1966, 1983) articulation of the identity status model, including his definitions of the identity achievement, foreclosure, moratorium, and diffusion statuses and an interview procedure to assess them. A self-report measure for assessment of the identity statuses further enhanced the ability of researchers to empirically examine identity (Adams, Bennion, and Huh, 1987). The result was a significant increase in identity research (e.g., Blustein, Devenis, and Kidney, 1989; Blustein and Phillips, 1990;

Galinsky and Fast, 1966; Grotevant and Cooper, 1986; Grotevant, Thorbecke, and Meyer, 1982; Jackson and Meara, 1977; Munley, 1975, 1977; Skorikov and Vondracek, 1998, 2007c; Vondracek, 1992, 1993, 1995).

Coincident with the surge in identity status research, lively discussion arose in the professional and scientific literature about the relative merit of investigating and measuring global identity versus measuring domain-specific (e.g., vocational) identity (Archer, 1985; Flum and Blustein, 2000; Goossens, 2001; Kroger, 2007; Skorikov and Vondracek, 1998; Vondracek, Silbereisen, Reitzle, and Wiesner, 1999). Although the relative salience of identity domains may vary across cultures and socioeconomic contexts, research has generally confirmed that vocational (occupational) identity development is a priority in adolescence (Bosma, 1992; Kroger, 1993; Silbereisen, Vondracek, and Berg, 1997; Skorikov and Vondracek, 1998; Solomontos-Kountouri and Hurry, 2008). Moreover, progress toward establishing a vocational identity has been associated with good grades in high school and engagement in extracurricular activities (Vondracek, 1994), as well as with reduced likelihood of problem behaviors during adolescence (Skorikov and Vondracek, 2007).

Identity research inspired by the formulations of Erikson has dominated developmental psychology and it has been the most productive avenue for research on vocational identity. Nevertheless, another impetus for vocational identity research was Holland's conceptualization of vocational identity as representing "the clarity of a person's vocational goals and self-perceptions" (Holland, 1985, p. 28). The MVS of Holland, Gottfredson, and Power (My Vocational Situation; Holland, Gottfredson, and Power, 1980) has been criticized, however, because it excludes the exploration dimension of identity (Vondracek, 1992), which most identity researchers believe is an essential aspect of identity development (Luyckx, Goossens, Soenens, and Beyers, 2006). Nevertheless, Holland's MVS (Holland et al., 1980) has been shown to be a reliable measure of career decidedness. The shortcoming of the MVS in measuring the full complexity of vocational identity is most likely not a unique situation. During the past decade, an increasing number of researchers have questioned the adequacy of the identity status paradigm in identifying all salient dimensions of identity in general, and vocational identity in particular.

The identity literature can be appreciably organized into research devoted to identity process, content, and structure (Bersonsky, Macek, and Nurmi, 2003; Kroger, 2002; Scottham, Cooke, Sellers and Ford, 2010). The study of vocational identity can be organized similarly. The process of vocational identity involves the actions and cognitions associated with vocational exploration and commitment to a worker role. The content of vocational identity centers on the substance of projecting the self into a worker role. This content can include one's personal narratives projected into work terms (e.g., Savickas, 2011), feelings and cognitions about becoming and being a worker (Ibarra, 2003), and the importance of work, work values, and personal work goals. The structure of vocational identity is indicated by its degree of crystallization, accessibility, and clarity. Identity content, structure, and process are at the center of identity development.

Process progress, structural integrity, and content elaboration occur in tandem and are related but they are independent dimensions. Process does not entirely determine identity content and identity content does not fully define its structural integrity. Identity process, content and structural integrity are, however, suggestive of one another. More in-depth exploration and wholehearted commitment to work is suggestive of a worker identity that, in content terms, is perceived as generally favorable, important, and an increasingly central

aspect of the self-concept and, in structural terms, is durable and accessible during times of change and struggle. Vocational identity process and structure say little, however, about the nuanced substance pertaining to how the self is projected onto work and into the worker role and vice versa.

PROCESS

Career development proceeds through the observations, actions, cognitions, and emotions involved in narrating a vocational identity in preparation for and across a lifetime of work (Savickas, 2011; Skorikov and Vondracek, 2007c). Scholars recognize that career development begins during the early childhood period (Hartung, Porfeli, and Vondracek, 2005; Watson and McMahan, 2005) and extends into old age (Porfeli and Vondracek, 2009). Childhood tasks include (a) learning about the world of work and establishing a basic sense of self; (b) imagining the self doing various work tasks, having different jobs, and being a part of different work settings; and (c) projecting the self into the world of work (e.g., a future worker self) to establish a budding worker identity. Early vocational identities often reflect gender stereotypes and are dressed with sensational occupations like actor, model, and athlete (Goldstein and Oldham, 1979). As children become adolescents and then emerging adults (Arnett, 2000), their vocational identity becomes shaped by an emerging awareness of personal talents, values, and interests and bounded by perceived opportunities and constraints. Progress toward achieving a vocational identity is felt as becoming one's self at work, the benefits of which include enhanced well-being and diminished distress throughout the adolescent period and into emerging adulthood (Meeus, 2011; Porfeli, Lee, Vondracek, and Weigold, 2011; Skorikov, 2007; Skorikov and Vondracek, 2007b).

A process model of vocational identity

Erikson (1956, 1968) brought the construct of identity to the fore by casting it within a psychosocial, crisis- (or task-) oriented model of human development. Empirical research of this construct was significantly advanced through Marcia's (1966) operationalization

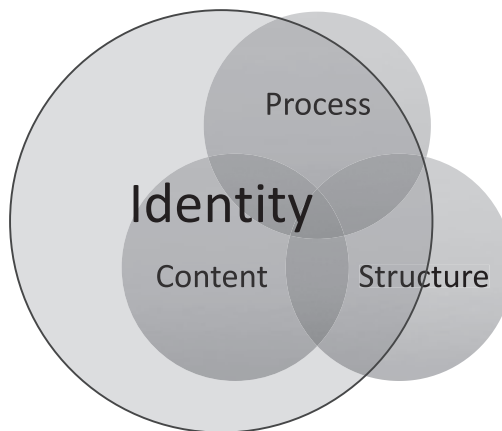


Figure 6.1 Dimensions of Vocational Identity: Process, Content, and Structure

of ego identity processes as being primarily defined by configurations of exploration and commitment. Two streams of research within the contemporary identity status literature (Crocetti, Rubini, and Meeus, 2008; Luyckx, Goossens, Soenens, Beyers, and Vansteenkiste, 2005) have been combined to suggest that the pathway toward establishing a vocational identity is composed of three processes, which include exploring, committing to, and reconsidering career alternatives (Porfeli et al., 2011). The significance of establishing a vocational identity was central to Erikson's identity concept as reflected in his writings and was later empirically established when it was found that vocational identity appeared to develop in advance of other identity domains (Skorikov and Vondracek, 1998).

Identity development is situated within a life-span psychosocial model where it is preceded by the task of establishing a sense of industry and followed by the task of establishing an intimate relationship with a romantic partner and family formation (Erikson, 1959). Erikson's theory suggested that a well-developed sense of industry—the capacity to derive pleasure from work and the worker role—during childhood was essential to successful identity development thereafter. Subsequent theory (Marcia, 1983) and research (Kowaz, 1989) demonstrated that industry is an important task of the childhood period and a precursor of identity development and even well-being during adulthood (Vaillant and Vaillant, 1981).

Recent empirical research demonstrated that measures including vocational exploration, commitment, and reconsideration can be used to situate adolescents and emerging adults among one of six vocational identity statuses (Porfeli et al., 2011). The six statuses include achieved, searching moratorium, moratorium, foreclosed, diffused and undifferentiated, and are defined by configurations of exploration, commitment, and reconsideration. Statuses with elevated reconsideration include the searching moratorium, moratorium, and diffused statuses, while those with diminished reconsideration include the achieved and foreclosed statuses (Porfeli et al., 2011). Reconsideration is apparently most useful in identifying searching moratorium, which has been a challenge of previous empirical efforts (Skorikov and Vondracek, 2007c). These statuses can be employed to construct group-specific career counseling interventions to further promote increasing clarity and connection to one's vocational identity. Before proceeding to the discussion about such interventions, we will first provide a review of what is known about the exploration, commitment, and reconsideration processes, which will serve as a rationale for the intervention suggestions to follow.

Career exploration

Exploration refers to learning generally and specifically about a particular life domain (e.g., friendships, family, religion, work, and politics). Vocational exploration involves exploring the self and the world of work broadly and deeply to ascertain the general features of the self and to learn about possible career alternatives that may exhibit a good fit with those features (Jordaan, 1963). Vocational exploration presumably proceeds with increasing in-depth exploration of core features of the self (e.g., interests, values, life goals) in relationship to career opportunities that are perceived as suiting these core features (Porfeli, 2008). In general terms, in-breadth vocational exploration gives way to in-depth exploration, but both likely operate across the life span as the perceived suitability of career choices and job satisfaction wax and wane. Lack of confidence or job satisfaction along a career pathway may

prompt in-breadth exploration (i.e., “looking around” or “exploring my options”) that may lead to a more focused exploration (i.e., in-depth exploration) centering on the steps needed to change career goals, prepare for a new career, and/or make a career transition.

This model of career exploration is rooted in basic research tied to how humans learn to explore their environments (Berlyne, 1960; Voss and Keller, 1983, 1986; Wohlwill, 1987). Literature suggests that self-directed exploration is established during the early childhood years and develops as a function of experiences that foster curiosity and exploratory behavior leading to favorable outcomes (Keller, Schneider, and Henderson, 1994). This literature also includes a distinction between in-breadth (i.e., diversive) and in-depth (i.e., specific) exploration by suggesting that children display a tendency to scan a new environment before focusing upon specific features. This empirically-supported theoretical proposition about general exploratory behavior was extended to career exploration by suggesting that children and adolescents may engage in a similar pattern as they are exposed to the world of work through vicarious experiences (Porfeli, 2008). This proposition was also supported by a prescriptive-systematic stage-based model emphasizing the importance of in-depth exploration in career decision making (Gati and Asher, 2001).

Empirical research supports the distinction between in-breadth and in-depth career exploration and suggests differential relationships among them with progress toward establishing a vocational identity. Research demonstrated that pre-existing measures of career curiosity could be modeled to be indicators of in-breadth and in-depth career exploration (Porfeli and Skorikov, 2010). This research also found that in-breadth exploration was generally associated with a lack of career planning and confidence, and in-depth exploration with increasing career planning and confidence. Subsequent research, centered on the development of in-breadth and in-depth career exploration sub-scales within the newly-developed *Vocational Identity Status Assessment* (VISA), confirmed the earlier findings regarding the structure and function of in-breadth and in-depth career exploration (Porfeli et al., 2011). This research demonstrated that different identity statuses exhibited theoretically predicted different patterns of in-breadth and in-depth career exploration. For example, the relative pattern for the two kinds of exploration suggested more in-depth exploration for those identity statuses exhibiting diminished career doubt and stronger commitment to and identification with a career choice (e.g., achieved and foreclosed statuses).

Career commitment

Career commitment generally involves two components, which are career choice decidedness and career attachment or identification (Blau, 1988; Germeijs, Verschueren, and Soenens, 2006). That is, career commitment is not just about making a choice but also has to do with attaching one's self to that choice. A *decision* is a thought, a *choice* is a behavior, and a *commitment* is a personal connection to one's decisions and choices. Career commitment can be seen as the product of a process that is presumably rooted in childhood and is readily observed at an early age when adults start asking the clichéd question, “What do you want to do when you grow up?” The response to this question has been studied from childhood to adulthood under concept labels like career aspirations and expectations and shows differences based upon gender, social class and age (Hartung et al., 2005; Watson and McMahon, 2005). With respect to age, this research demonstrated that aspirations are increasingly stable as children age into adolescence and adulthood. A related extensive literature supported this

trend by demonstrating that adolescents exhibit increasing career decidedness over time (Creed, Prideaux, and Patton, 2005). The decidedness literature also shows that adolescents exhibit meaningful intra-individual variability relative to this general increasing trend in career decidedness (Creed et al., 2005; Hirschi, Niles, and Akos, 2011). The decidedness research also suggested that increased decidedness contributes to favorable outcomes like personal adjustment (Creed et al., 2005; Skorikov, 2007), career maturity (Creed and Patton, 2003), persistence in pursuing an undergraduate degree (Krause, 1998), and favorable work outcomes (Callanan and Greenhaus, 1992; Earl and Bright, 2007). While these literatures inform our thinking about career commitment, Blustein, Ellis, and Devenis (1989) asserted that relatively little research has examined the commitment that springs from a career decision.

During the past decade a program of research centering on career commitment has demonstrated a general trend toward increasing career commitment across the high school and young adult years with substantial intra-individual variability around this trend (Germeijs et al., 2006). Previous level of career commitment, in-depth exploration, indecisiveness, choice anxiety, and coping with decisional tasks predicted later career commitment in expected directions, which in turn predicted academic adjustment (Germeijs and Verschueren, 2006, 2007; Germeijs et al., 2006). Consistent with broader theoretical assertions (Blustein, Phillips, Jobin-Davis, Finkelberg, and Roarke, 1997), career commitment is a favorable aspect of adolescent development that apparently ties to academic development in a meaningful fashion.

In light of the two aspects of career commitment, namely career decidedness and attachment, the recently developed VISA was designed to include career decidedness (i.e., commitment making) and identification (i.e., identification with commitment) subscales within the commitment dimension (Porfeli et al., 2011). This work was inspired by previous measures of commitment cast within an identity framework (Blustein, Ellis, et al., 1989; Crocetti, Rubini, Luyckx, and Meeus, 2008; Luyckx et al., 2005). The pattern of decidedness and identification across the six identity statuses created by the VISA suggested that scores on the subscales are strongly correlated, typically consistent within each identity status, but exhibit theoretically predicted differences across identity statuses (Porfeli et al., 2011). Moreover, adolescents and young adults assigned to the statuses signaling increased career commitment (i.e., commitment making and identification) demonstrated more favorable self-evaluations and less depression and anxiety than those assigned to the less committed statuses (Porfeli et al., 2011). On a more granular level, career identification exhibited stronger negative associations with career self-doubt than did career commitment making (Porfeli et al., 2011). Results like those reported here underscore the validity of career commitment as being defined by career decision making and career identification.

Career reconsideration

Reconsideration of commitment refers to re-examining current commitments and comparing available alternatives in an effort to find a better fit of the self and the world of work. Consideration of career alternatives leads to crystallization of preferences (preferred alternatives). Reconsideration can involve outcomes from no change, further specification of a choice through decision making, or changing choices altogether. Reconsideration is conceived of a critical process in identity development from adolescence and thereon (Crocetti, Klimstra, Keijsers, Hale, and Meeus, 2009; Crocetti, Rubini, Luyckx et al., 2008;

Crocetti, Rubini, and Meeus, 2008; Meeus, 1996) because, conceptually, it is likely to emerge after one has made at least a tentative commitment. A three-factor model of identity status (i.e., in-depth exploration, commitment, reconsideration) applied primarily to adolescents, consistently found five identity statuses, where four statuses echoed Marcia's classical identity statuses and the fifth reflected a new searching moratorium status. The process of reconsideration and the searching moratorium status is comparable to the MAMA (Moratorium–Achievement–Moratorium–Achievement) cycle discussed in earlier studies (e.g., Stephen, Fraser, and Marcia, 1992), which refers to the process of releasing an already-established identity in search of an alternative identity. The common thread between the concept of reconsideration and the MAMA cycle is the recognition of the dynamic nature of identity development (Bosma and Kunnen, 2001). Identity is a psychosocial construct and defined as an integrated sense of self in relation to its environment. A changing environment can, therefore, lead to changes in identity. Dropping out of college or losing one's job and being confronted with the need to change careers (or career plans) can be not only distressing but also a threat to one's vocational identity and self-concept.

Porfeli et al. (2011) acknowledged the significance of the process of career reconsideration and applied it to the study of vocational identity development. They presumed the process to involve a favorable and an unfavorable aspect and developed two distinct forms of reconsideration, namely career doubt and career flexibility. Career doubt was conceptualized to reflect the unfavorable aspect of reconsideration, which assumes that the process occurs as a result of some uncertainty about one's commitment to a career. Career decisions are among the few decisions with meaningful, often lifelong, consequences. The gravity of these decisions can breed doubt in even the most decisive people. Career flexibility reflected a more favorable and adaptive character of reconsideration, which highlights the openness to alternative careers that emerges over time. Similar to Crocetti and Meeus' findings (e.g., Crocetti, Rubini, Luyckx et al., 2008; Crocetti, Rubini, and Meeus, 2008), they found a group of individuals in *searching moratorium* status who were characterized as being committed to a career and having experienced a significant level of exploration but being open to alternatives. In addition, a larger proportion of high school students than college students were classified in identity statuses that involved a high level of career reconsideration (i.e., searching moratorium, moratorium, diffused), suggesting that reconsideration may be more prevalent among those who have not yet reached the "developmental deadline" (Heckhausen and Tomasik, 2002) of choosing a job. Career reconsideration, therefore, appears to include remaining open to possible revisions to one's career plan and dealing constructively with the doubt associated with that plan.

Career decidedness research adds further validity to the conceptualization of the reconsideration process. Gordon (1998) analyzed subtypes of career decidedness derived from multiple studies. One of the subtypes identified was *unstable decided*, which indicated individuals who have decided upon a career but exhibited high goal instability and a high level of anxiety. That is, these students were able to declare a career plan but were unclear about its suitability and were very unsure if they could achieve it. Hypothetically, once people realize that a career choice is unsuitable, they are likely to eventually explore alternative options. Moreover, the *chronically indecisive* group was characterized with a high level of anxiety, which served as the biggest barrier to arriving at a career decision. Adolescents in this group may have increased self-doubt, which is reflective of the negative aspect of reconsideration. On the one hand, it seems that psychological predispositions, such as

chronic anxiety and low self-esteem, are associated with reconsideration. For example, Crocetti et al. (2009) reported that anxious adolescents exhibited more and increasing reconsideration relative to their less anxious peers. This finding implies that reconsideration may be a result of uncertainty that is internally driven. On the other hand, reconsideration prompting career or even vocational identity change may be prompted by contextual and environmental influences ranging from the micro- (e.g., job loss within the family) to the macro-levels (e.g., economic recession). The contemporary world of work is much more dynamic than it was decades ago. Rapid changes in the labor market like globalization and downsizing may change the very nature of identity conceptualized as an increasingly stable psychological entity (Coutinho, Dam, and Blustein, 2008; Hall, 2004; Ibarra, 2003). An increasingly changeable and dynamic labor market or organization may prompt vocational constructs like identity and self-concept to become more dynamic over the life course than was originally the case within the context of the twentieth century (Erikson, 1968; Super, 1957). The goal of achieving an increasingly crystallized vocational identity may give way to maintaining a sufficiently adaptable vocational identity promoted partly by ongoing reconsideration through the majority of one's working life.

EXPLORATION, COMMITMENT, AND RECONSIDERATION AS THREE INTERWOVEN THREADS OF IDENTITY STATUS

Theory suggesting a sequence to the emergence of the exploration, commitment, and reconsideration strands (Marcia, 1983), coupled with previous empirical findings (Meeus, 2011), suggests that the three identity processes may emerge during the later childhood period, become more pronounced and increase over time, and mutually influence one another in a complex dynamic fashion. In previous research on high school and college students (Porfeli et al., 2011), both forms of vocational exploration (i.e., in-breadth and in-depth) were positively associated with career commitment (i.e., commitment making and identification). In-breadth vocational exploration was positively associated with the self-doubt aspect of vocational reconsideration, and in-depth vocational exploration was negatively associated with career flexibility. Finally, both forms of commitment were negatively associated with both forms of reconsideration. These results suggest that changes in one process may be associated with changes in at least one of the other two if not both. In other words, the three identity processes and their constituent parts are associated in a complex interdependent fashion.

Research in the field of career decision making supports the existence and inter-relationships of the three identity processes. Feldt et al. (2010) examined the factor structure of the Career Decision Scale (Osipow, 1987) and found that the scale best conformed to a three-factor structure including factors entitled identity diffusion, positive choice, and tentative decision. The names of the factors and their tie to identity suggest the conceptual links between decidedness, commitment, and reconsideration. Commitments are dependent on decisions and change partly as a consequence of reconsidering alternatives. Reconsideration may be promoted by the doubt associated with finding and making a career choice and the degree to which people make tentative decisions reflecting a flexible posture toward those choices. Doubt and flexibility are two different but related reasons for remaining undecided (Porfeli et al., 2011). Differing rationales for reconsideration can prompt different approaches to achieving a career decision and ultimately a career commitment. Holland

(1992) suggested that increasing awareness and differentiation of interests and a strengthening commitment to an occupation reflected advancing vocational identity development. In this sense, vocational interests differentiation reflect an increasing refinement of the vocational identity, while commitment to an occupation reflected the degree to which one's vocational identity was becoming established. These assertions were supported in subsequent empirical research (Hirschi, 2011; Im, 2011; Nauta and Kahn, 2007). Holland did not directly attend to the role of identity exploration, but one could reasonably conclude that it was implicit in the model given that he asserted that interests were established, refined, and differentiated on the basis of exploration and experience.

The identity status concept is used to merge the three processes on the basis of process patterns and may provide a different perspective than one offered by the linear associations. Recent reviews of the identity status research revealed more stability than change in identity statuses during the adolescent period, and the diffusion, moratorium, and foreclosure statuses became less prevalent with age (Kroger, Martinussen, and Marcia, 2010). When status change occurred, the most typical developmental progression was diffusion to moratorium to foreclosure to achievement (Meeus, 2011).

A growing segment of the longitudinal research methods literature is endorsing person- and pattern-oriented methods of studying human development that are consistent with the identity status approach. Many statistical methods applied in the social science literature are based on the assumption that people are relatively homogenous (e.g., regression-based models including SEM and growth curve models). Those methods are often ineffective at identifying and assessing complex interactions or varying developmental streams across different groups of people (Sterba and Bauer, 2010). A nice example of a person-oriented approach is Crocetti and colleagues' (Crocetti et al., 2009) longitudinal study of how adolescents' identity statuses change over time in relation to their anxiety level. They classified adolescents into two groups that showed distinct patterns of anxiety level. They found that those who reported greater anxiety levels demonstrated a weakening level of commitment with age and increased reconsideration than their counterparts with lower anxiety. These different patterns of identity development by anxiety trajectory class would not have been identified if the identity processes were simply regressed on anxiety. The approach taken was not strictly person-oriented (i.e., exploring a single person) but it demonstrated that group and population inferences on the basis of linear associations may not accurately describe real people (Bergman, Magnusson, and El Khouri, 2003). Person- and pattern-oriented approaches may complement variable-based approaches by offering information regarding complex interactions among variables or inter-individual differences in intra-individual change when variable-based approaches suggest a rather simple relationship among variables, such as X predicting Y, or fail altogether to apply at the person level.

CONTENT

The substance of vocational identity or "Who I am at work?" is complex and multifaceted, encompassing a broad range of attributes. The psychosocial nature of vocational identity suggests that the self-in-context determines its substance. In other words, one's identity is a co-construction that emerges from the joint contribution of person and context. More traditional terminology would hold that it is "psychosocial" in nature, with the person and

contexts being the principal architects and builders (Cheek, 1989; Cheek and Briggs, 1982). Recognizing that the separate consideration of person and context can be a useful conceptual and methodological tool, it may be noted that psychological aspects commonly identified as central to vocational identity include interests, values, goals, and capability beliefs. Context aspects include occupation characteristics (e.g., prestige), work role, social network, and task demands. It should be clarified here that our understanding of *context* refers only to that part of one's environment with which one can currently interact. The content and organization of each kind of context provides a framework that facilitates some kinds of person-in-context patterns and constrains others (e.g., compare working in a factory, law office, or research lab). More distal *environmental* influences, such as labor policy and the general state of the economy, may also influence a person's behavioral pathways, but this influence is indirect and cannot be readily modified to support the individual's current goals.

Psychological

Vocational interests

Vocational interests are commonly defined as an individual's likes (and dislikes) (e.g., Strong, 1927) or as preferences for specific activities (e.g., Kuder, 1966). They have been variously operationalized as a combination of attention, preferences, goals, and competencies (Savickas, 1999). Holland (1992) asserted within the Person–Environment Fit Theory that vocational interest types are a reflection of vocational personality types, and Savickas characterized interests as a trait-like disposition reflective of the self. More recent work prompted by rapid changes within the labor market now shake our confidence in the trait-like stability of interests (Savickas et al., 2009).

Holland, Savickas, and others (Armstrong and Vogel, 2009; Becker and Carper, 1956; Leung, Conoley, Scheel, and Sonnenberg, 1992; Meijers, 1998; Vondracek and Skorikov, 1997) agree that vocational interests represent a significant aspect of the self at work, or in other words, a vocational identity. A conceptual model of vocational interests as being an aspect of vocational identity has been recurrently asserted and supported in the empirical literature (Armstrong and Vogel, 2009; Hazari, Sonnert, Sadler, and Shanahan, 2010; Vondracek and Skorikov, 1997). Interests reflect one's vocational identity to the extent that they reveal one's work-role-based preferences and competency beliefs.

Work values and goals

Establishing a vocational identity and prioritizing work values are complementary tasks. The content of vocational identity and the relative salience of various work values are close companions (Hogan and Roberts, 2004). Values and identity are linked through patterns of behavior and experience reflecting life themes. Values and identity are subject to modification across the life span as a consequence of exposure to persistent patterns of experience that encourage or discourage recurring patterns of behavior. For example, coming to place a strong value on altruistic work may spring from establishing an altruistic vocational identity and both may be the product of recurring behavior experience patterns affirming the rewards of being altruistic at work. Conversely, a vocational identity with an emerging altruistic theme suggests that strengthening altruistic values will follow along with behavior–experience patterns

capitalizing on opportunities to be altruistic at work. Discrepancy reduction between identity and values (i.e., an “identity standard”) may be a core mechanism shaping both over time (Burke, 1991) in a manner akin to the link between work values, rewards, and satisfaction (Porfeli and Mortimer, 2010).

Work values and goals are related and both serve to guide and regulate one’s vocational identity, yet they are distinct. While values are basically durable abstract goal preferences, work-related goals are specific, time- and context-limited desired (or undesired) outcomes, states, or statuses that, when achieved, generally lead to satisfaction and the strengthening of related work values and interests (Feather, 1992, 1995; Porfeli and Vondracek, 2007). Goals are, however, more susceptible to the ongoing changing flow of experience, and any given goal may be more or less aligned to one’s values. Burke (1991) asserted that harmony between identity, values, and goals yields satisfaction and confidence, which sustains and strengthens each of them. Disharmony between a vocational identity and its standards breeds distress, prompting changes to goals, values, or to the identity itself.

Goals are more proximate to behavior, reflective of values, and guided by one’s identity. Given that identities are manifestations of the self in life roles, value and goal conflict often arises at the juncture of life roles like worker and family member, spanning life role settings like work and home. “Earning your stripes” by “putting in your time” at work may be in conflict with “being a good parent” who “spends time with the children.” These conflicts often breed substantial distress and self-reflection. Self-examination of work behavior, goals, and values is an examination of one’s vocational identity facets, and self-examination of goal or value conflict across life roles is, in part, an examination of identity conflict.

Psychosocial

Personal agency beliefs

Optimally, patterns of vocational interests and patterns of work values converge and guide the formulation of valued and meaningful work-related (occupational) goals that are consistent with one’s vocational identity. The relative vigor with which such goals are pursued depends to a large extent on the individual’s personal agency beliefs. In other words, *who we are at work* is influenced by *what we believe we can do at work*. Armstrong and Vogel (2009) contended that vocational self-efficacy is a core feature of vocational identity. Theories of self-efficacy are limited, however, by their almost exclusive focus on competency beliefs to the exclusion of context beliefs (Ford, 1992). Like identity, personal agency beliefs are formed from estimates of personal competence in combination with beliefs about the supportive or obstructive nature of the context (Ford, 1992). Patterns of capability and context beliefs may lead to *robust* (favorable competence and context beliefs), *fragile* (unfavorable competence and favorable context beliefs), *antagonistic or accepting* (favorable competence and unfavorable context beliefs), and *hopeless* (unfavorable competence and context beliefs) belief–affect patterns that reflect the relative strength of motivation to pursue pertinent goals (Ford, 1992). Should these belief patterns become generalized and ingrained, they could become thematic elements of a vocational identity characterized as robust, fragile, antagonistic or accepting, or hopeless.

Contextual

Work role, social network, and task demands

The development of a vocational identity during the pre-adult years may be promoted by contextual affordances such as educational experiences, household and part-time work experiences, and adult work experienced vicariously through family, community, and media sources. Moreover, one's friendship network during the grade-school years can impact one's life orientations (Gustafson, Stattin, and Magnusson, 1992) thereby leading to different vocational identities. During the adult years, vocational identity is appreciably influenced by one's (a) self-described career or job role (i.e., responses to the question, "What do you do?"); (b) network of friends, co-workers, customers, and colleagues (i.e., responses to the question, "Who do you know?"); and (c) day-to-day work tasks (i.e., responses to the question, "What did you do today?"). The work role, in particular, represents the core component of one's vocational identity. A vocational identity brings meaning and serves to synthesize day-to-day work tasks, relationships, and work roles. For example, being in a career that centers on educating or helping other people could, on its face, have a different meaning than being in a career that involves entrepreneurial or detention work, but one's vocational identity can appreciably shape a teaching career into a wide range of meanings to include creativity, detention, or entrepreneurial work. Work roles, relationships and tasks interact with vocational identity to bring meaning to the moment and to life.

STRUCTURE: IDENTITY PROCESSES AND CONTENTS AS CAUSAL FIELDS

The process and content of vocational identity may be conceived and organized as two interacting causal fields of process and content or as one meta-field with interacting process and content aspects. A causal field or frame is the boundary that serves to delineate and structure the processes and concepts of a causal inference or theory (White, 1990). Variables within a causal field can function as both causes and effects, demonstrate linear and non-linear relationships, and combine to operate as a functional unit or entity. In simple terms, the action of exploring, committing, and reconsidering an identity is both the source and product of identity contents like interests, values, goals, and personal agency beliefs.

Identity processes structured as a causal field

As discussed above, the process of identity development may be composed of exploring, committing, and reconsidering how the self is cast into worker roles. These three processes may be organized into a causal field of identity processes that becomes manifested into identity statuses. [Figure 6.2](#) is an example of how the causal field of identity processes may be exhibited by a person. This Figure is not meant to illustrate "the" casual field of identity process. Instead, it is intended to demonstrate that the features of the field are probably highly individualistic with three processes existing and interacting in an increasingly coordinated and dynamic fashion over time.

Starting from the theoretical proposition that during the transition from childhood to adolescence exploration precedes commitment (Marcia, 1983), which, in turn, naturally

precedes reconsideration (since one needs some degree of commitment in order to reconsider a commitment), suggests the possibility that the three threads of identity process are interwoven into a fabric or field akin to oscillating patterns exhibiting more or less phase shift on the basis of a time delay in the three processes. Laying a straight edge perpendicular to the time axis of the top frame in [Figure 6.2](#) and moving it left to right demonstrates this possibility. As exploration increases, commitment tends to increase and vice versa. As commitment wanes, reconsideration waxes. The degree of phase alignment with the oscillating threads demonstrates the degree of association ranging from negative (i.e., in antiphase or 180°), to zero (i.e., the midpoint between being in phase and antiphase or 90°) to positive (i.e., completely in phase or 0° difference). Exploration and commitment are depicted to be more in phase because previous research has shown that both aspects of exploration and commitment are positively correlated. Exploration and reconsideration are depicted to approach the midpoint between being in phase and antiphase or a zero correlation. This is due to previous research demonstrating that in-depth exploration and self-doubt show a negative association, while in-breadth exploration and flexibility show a positive association, which yields approximately a net zero correlation between exploration and reconsideration (Porfeli, Lee, and Vondracek, 2010). Finally, commitment and reconsideration are depicted to approach antiphase because indicators of both factors show consistent negative correlations.

The middle frame of [Figure 6.2](#) aligns the traditional identity statuses (Marcia, 1966) with the proposed field of process patterns. The achieved status occurs during the point in the cycle when exploration and commitment are elevated and reconsideration is minimized. Foreclosure occurs when commitment is elevated and reconsideration and exploration are diminished or absent. Moratorium is defined by that point in the multi-process cycle when exploration and reconsideration are elevated and commitment is diminished or absent. Finally, diffusion is suggested when reconsideration is elevated and exploration and commitment are diminished.

The bottom frame of [Figure 6.2](#) suggests that identity statuses may hinge on the pattern, amplitude, history, and timing of each identity process. The early period demonstrates how vocational exploration, commitment, and reconsideration exhibit greater independence earlier (childhood) and move into a more harmonious pattern later (adulthood). Such a suggestion is consistent with empirical findings suggesting that people tend to move across the classic identity statuses in the following order: diffusion (D) to moratorium (M) to foreclosure (F) to achievement (A) (Kroger et al., 2010; Meeus, 2011). For the particular pattern depicted in [Figure 6.2](#), the diffused (D) or undifferentiated (UD) patterns occur in the early period. Early moratorium (EM) is marked by early elevated exploration minus prior elevated exploration and reconsideration, while early closure (EC) is marked by early elevated commitment minus any prior period of concerted reconsideration. Achievement may be distinguished from early closure by some period of time during which a person has exhibited elevated levels of all three processes, with all three demonstrating some degree of harmonious oscillation (e.g., as exploration increases, increasing commitment follows, or as commitment wanes, reconsideration waxes). In sum, previous research suggests that identity processes interact in a complex dynamic manner. Testing a wave model like the one illustrated here will require time series data such as weekly data spanning a few years through the transition from school to work.

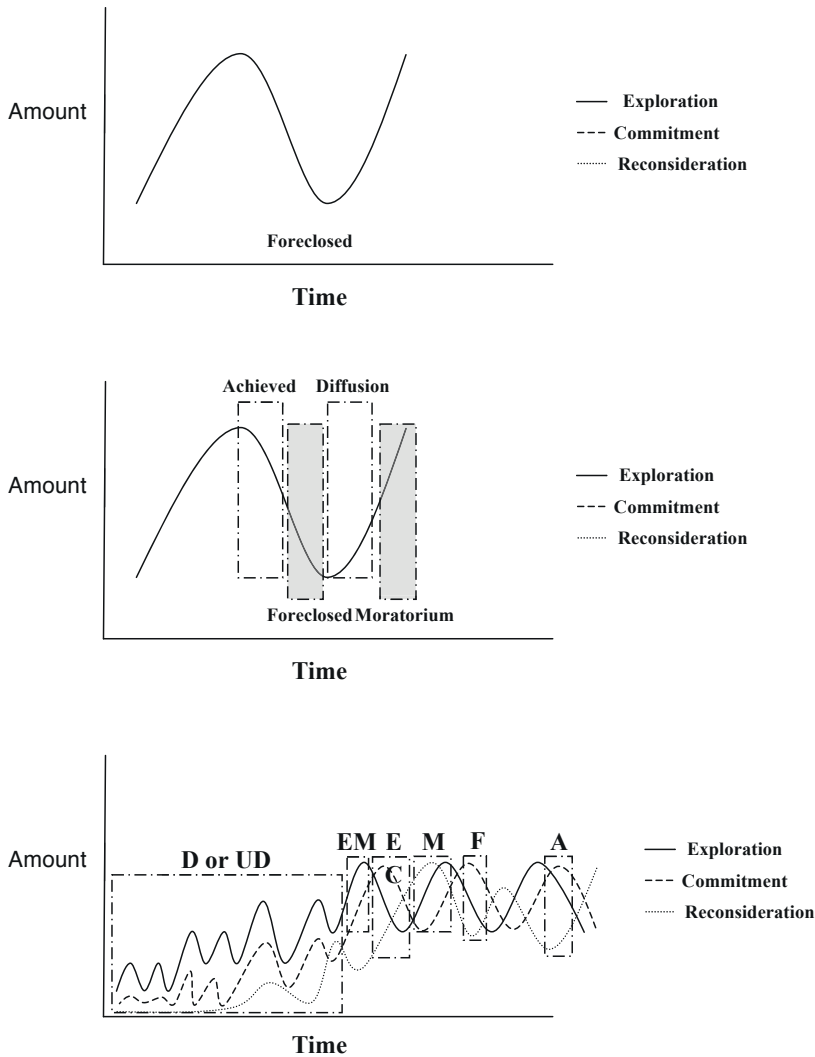


Figure 6.2 Predicted trends in Exploration, Commitment, and Reconsideration over time

Identity content as a causal field

Research reviewed above examining the content of vocational identity suggests that it is composed of a causal field of psychological attributes like interests, values, and goals, psychosocial characteristics like personal agency beliefs and social roles, and contextual features like social networks and vocational experiences. This causal field is presumed to be both flexible and changeable as a function of the changing person living across a diverse array of changing contexts.

The causal field of identity content can be framed in terms of means–ends thinking. Action theory suggests that action is the consequence of a person selecting a means (e.g., vocational activity interests) to achieve an end (e.g., vocational goals and values) that is influenced by an appraisal of one’s capacity to enact the means (e.g., confidence or personal agency work beliefs) (Malmberg and Little, 2007). This sort of thinking is often manifested into identity-oriented questions such as:

- Work Values and Goals as Ends—What do I want to achieve and how do I want to represent myself through work?
- Work Interests as Means—What desirable (preference) activities can I do well (competency) at work?
- Personal Agency Beliefs about Work as the Dash in Means–Ends Thinking—Can I achieve valued aspects at work through engaging in interesting work activities?

Personal agency beliefs may serve as a bridge between work means (i.e., work activity interests) and work ends (i.e., work goals and values). They may be conceived as the dash in “means–ends” thinking in a way that is akin to how the dash has been used in person–environment fit to suggest iterative interaction (Savickas, 2005). Poulin and Heckhausen (2007) characterized personal agency beliefs as *control-related means–ends beliefs* and defined them as the extent to which people believe that desired ends are attainable through the exercise of their current or attainable means in terms of ability and effort. An example item from their effort scale is “If one invests much energy in writing many applications, one will find a suitable apprenticeship” (p. 303). Their work found that the relationship between stressful life events and the striving to exercise control over the transition to work (e.g., obtaining an apprenticeship as in, “If I get refusals to my applications, I will try even harder to get a suitable apprenticeship position” [p. 303]) was mediated by personal agency beliefs.

The graphics and set of theoretical propositions bearing on causal fields is only one highly stylized way of depicting prior theory and research. It suggests that longitudinal data is required to better determine the identity status of a person if pattern, amplitude, and history are both necessary and sufficient conditions for defining identity status. To test this proposition, identity process and status researchers would need to conduct long-term time-series data collection to better discern the nature of the relationships between exploration, commitment, and reconsideration over time within and across people and how the history of all three leads to later identity process patterns. Further, they would need to be skilled with advanced methodologies that allow examining longitudinal associations and dynamic interaction among variables within a system (Molenaar and Campbell, 2009).

The content of vocational identity may be partly structured by the meaning and salience a person ascribes to it. Research in this area finds empirically supported distinctions on the basis of goals and dynamics yielding work as a *job* (more extrinsic goals and stability), *social ladder* (more extrinsic goals and growth), *calling* (more intrinsic goals and stability),

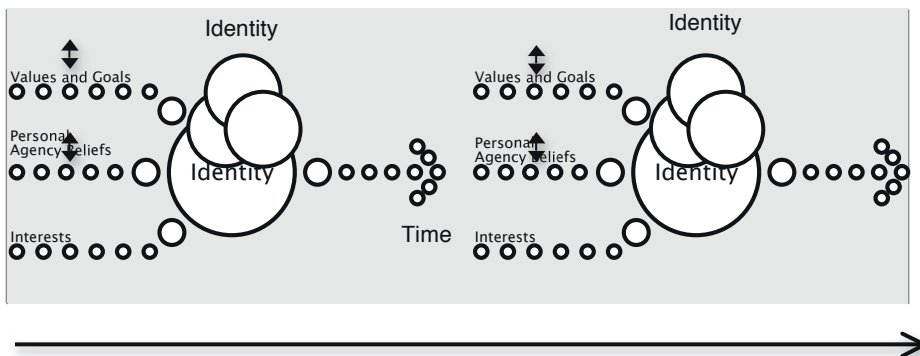


Figure 6.3 Configurations of Values and Goals, Personal Agency Beliefs, and Interests in the Service of Identity over Time

or *career* (more intrinsic goals and growth). A person holding a job is not the same as a person pursuing a calling, climbing the ladder, or building a career (McKeague, Skorikov, and Serikawa, 2002; Skorikov and Vondracek, 2007a). A second dimension, namely work salience, may play an affective role explaining the energy or vigor with which a person engages in their job, ladder, calling or career. Projecting the self into these different conceptions of work and imbuing them with more or less emotional energy may lead to qualitative differences in the content of vocational identity.

IMPLICATIONS FOR CAREER INTERVENTIONS

As previously noted, establishing a vocational identity during childhood and adolescence is a crucial developmental task. Whether the target of intervention is promoting a career choice or providing an environment to openly explore a wide array of occupations, the optimal goal for career interventions should be to facilitate the development of a vocational identity. Several considerations are required when developing career interventions.

First, the interwoven nature of the vocational identity processes and their presumed convergence in identity statuses suggests that interventions designed to influence any one of the three processes should also be evaluated to the extent that they affect the others. For example, interventions that facilitate career exploration (Herman, 2010; Lusk and Cook, 2009) may also have direct and indirect effects on participants' career commitment and reconsideration. Those effects may be mainly in the positive direction but could also be negative. Increasing in-breadth exploration may prompt those who are strongly committed to a career choice to exhibit diminished commitment over time to the extent that in-breadth exploration prompts career reconsideration (e.g., doubt). Essentially, this can be conceived as a moderation and/or mediation proposition. The association between exploration and commitment may vary on the basis of the degree of reconsideration. Alternatively (or in addition), exploration may influence reconsideration, which in turn influences commitment. The point here and one made previously (Meeus, 2011) is that the relationships between the identity processes may be more interdependent and not as sequential (e.g., exploration leading to commitment) as some have suggested. Interventions should account for the complex interplay of each identity process with all others and should attend to the direct and indirect influence of an intervention on these processes.

Second, different levels in the ecological system should be taken into account. A highly customized and person-centered intervention, such as individual career counseling and guidance (Savickas, 2011), is likely to be the most effective way to promote vocational identity development. If one pursues to intervene with a large number of people, the larger contexts, such as schools and communities, and how those contexts within the broader environment work in concert with or in opposition to establishing favorable vocational identities, should be taken into consideration (Lerner, 2006). An example would be a kind of curriculum that helps students make connections between school subjects and different types of occupations around the neighborhood or district. Community- and faith-based organizations may get involved by providing career programs that are closely tied to local business while teachers can help students to think about how specific subject matters learned in school could be utilized within such clusters of jobs. Exposing students to favorable, high quality hands-on work experiences in their community will offer them the opportunity to explore career options beyond a superficial level. Moreover, adolescents would feel more

confident in making a commitment if they knew that there were job opportunities available in the community, which in turn may lower their reconsideration. Linkages between contexts will hold the promise of promoting exploration, commitment, and reconsideration, leading to the establishment of a vocational identity. The absence of these connections is likely to at least forestall vocational identity development and at worst lead to a long-term state of identity diffusion, which is known to have adverse long-term developmental and health consequences (Vaillant and Vaillant, 1981).

Third, the timing of interventions should be carefully considered. Many career guidance and intervention programs in the United States focus on the adolescent and/or college years. The reason for this is often not explicit, but is generally aligned with the presumed timing of career decisions and the transition from school to work. There are much fewer programs that target children because career development is seen as a very distal developmental task for them. The literature, however, fails to support the argument that career development is a less relevant developmental task for children and, in fact, the literature shows that children begin to be socialized to work as early as the preschool years (Hartung et al., 2005). Children, from a very early age, develop interests, values, and aspirations through interaction with family members, teachers, the media, and peers, which later on becomes the foundation of broad ideas about work, their career interests, and career decisions. Early to late childhood may be a good time to explore career options because it is a time when children are free from needing to make an immediate commitment. Moreover, because children have extra time to try out many different options, they are less likely to be trapped in uncertainty of commitment, which is usually problematic for older adolescents or even emerging adults when the time to make a decision arrives.

Fourth, the work of finding a suitable career and establishing a vocational identity was thought to begin during adolescence and conclude during emerging adulthood. Contemporary scholars have argued and demonstrated that the deconstruction of the career ladder, serial jobs and careers, blurring of student and worker statuses, and phased retirement and post-retirement work has led to many more work transitions across the life span (Porfeli and Vondracek, 2009; Savickas, 2011). With increasing transitions comes the possibility of an ongoing revision to one's vocational identity (Ibarra, 2003) and suggests that vocational identity development skills must be retained and employed beyond emerging adulthood and possibly through the transition to retirement within modern and changeable labor markets.

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