Measuring Vocational Identity Development in Children and Adolescents

Mark L. Savickas

Northeastern Ohio Universities

College of Medicine

Rootstown, Ohio 44272

U.S.A.

Prepared for presentation in J. Perron & F. W. Vondracek (Co-Convenors),

Identity and Vocational Development Across Culture and Time,

XIV Biennial Meeting of ISSBD, Quebec, August 12-16, 1996.

Abstract

Given the usefulness of the construct "vocational identity" in consolidating the literature on career indecision among adolescents, it seems possible that the construct might also provide a heuristic perspective from which to advance understanding of career development among children and adolescents as well as provide a focal point for integrating knowledge about psychosocial identity development, childhood work behavior, and formation of educational and vocational choices. The research program described herein devised a developmental model to conceptualize the formation of vocational identity and continues to examine the psychometric properties of a measure constructed to assess vocational identity development among children and adolescents. The Student Career Concerns Inventory was designed to measure degree of development along a sequence of thematic tasks that culminate in the specification and implementation of a vocational identity. The scales in the inventory systematically blend (a) Erikson's model of identity development, (b) Super's structural model of career development during childhood, and (c) empirical findings concerning children's work behavior. After explaining the model used in constructing the inventory, the present paper describes the work leading to construction of a research form of the Student Career Concerns Inventory.

Measuring Vocational Identity Development in Children and Adolescents

Theoretical and empirical work conducted by Super (1985) and his colleagues in the Career Pattern Study has shown that vocational life stages and substages can be identified in adults. These stages are described in Super's (1990) model of vocational development which he formulated by building upon ideas about human development explained by Buhler (1933), Havinghurst (1955), and Miller and Form (1951) and which he refined based on his own reflection and empirical research. In the life stage model, Super postulates five stages of vocational development. Three of the stages pertain to adulthood: establishment, maintenance, and disengagement. A transitional stage of exploration pertains to adolescence and an initial stage of growth, growth pertains to childhood.

Following more that three decades of programmatic research, Super turned his model of vocational life stages into an instrument for assessing the career development status of older adolescents and adults. Super, Thompson, and Lindeman's (1986) Adult Career Concerns Inventory (ACCI) measures the three adult life stage stages as well as the transitional stage of adolescence. Super intended the ACCI for use with older adolescents who are about to join the workforce and with adults who are thinking about their career choices, changes, and development. The ACCI has been used extensively by researchers to operationally define adult vocational development. Educators and counselors have found the ACCI be a useful tool for identifying the focus for and content of developmental interventions in career education programs for groups and in career counseling with individuals. The merits of the ACCI have been such that the inventory has been translated for use in several countries (e.g., Ferreira Marques & Duarte, 1992; Tétreau, Dupont, & Gringas, 1992) and adapted for use with individuals in specific careers such as physicians and nurses (Savickas, Super, & Thompson, 1983; Savickas, 1984).

Given the success of the ACCI, I wondered whether life stages can be

identified and measured in students like they can in adults. If substages can be assessed in students, then school counselors could be more precise in designing and delivering career interventions to foster vocational development. Also, an inventory that assesses the developmental themes of the growth stage might prove to be useful in addressing the important problem of differentiating among multiple subtypes in groups of undecided students. The present paper reports the current status of our work to develop the <u>Student Career Concerns Inventory</u> (SCCI) intended for use in research and counseling that addresses the developmental themes in the growth stage of vocational development.

The Model

The first step in preparing a research form of the SCCI involved an examination of Super's conceptualization of the growth stage in vocational development. In presenting the framework for the Career Pattern Study, Super (1957) outlined the vocational development tasks of childhood. He wrote that a preschool child should show an increasing ability for self-help and for self-direction as well as identification with the like-sexed parent. An elementary school child should undertake cooperative enterprises, choose activities suited to one's abilities, assume responsibility for one's acts, and perform chores around the house.

Years later, in presenting his model for Career Development Assessment and Counseling (C-DAC), Super described in detail the personality characteristics that are fundamental in career development. He wrote that "a sense of autonomy or internal locus of control, self-esteem, and time or future perspective are essential to planning, exploration, and the acquisition of career skills and information" (Super, 1983, p. 558). These traits are developed in childhood and strengthened in adolescence. Furthermore, the traits sustain career choice readiness during the exploration stage of vocational development. As such, these variable are not components of adolescent career maturity but they are determinants of it. Because they develop during the growth stage, they probably are linked to the childhood

vocational development tasks. For example, autonomy seems to logically connect to self-help, self-direction, and responsibility and self-esteem seems to link with choosing suitable activities and performing chores.

In his final statement about childhood career development, Super (1990) described his model as "a person-environment interactive model of the bases of career maturity. This "web model" depicts the critical variables that foreshadow career maturation during adolescence. Within the web model, Super specified potent variables that are "means for developing the attitudes and skills of career readiness" (Super, 1990, page 233). The critical variables in the web that support career planning, exploration, and decision making are time perspective, internal locus of control, curiosity, exploration, information, interests, self-esteem, and identification with role models or key figures. The web model is primarily a structural model of development, not a stage model. Nevertheless, it seems apparent that the variables can be portrayed in a sequence to construct a model of the substages of the growth stage, especially if the basic variables are conceptually linked with the vocational development tasks of the growth stage of a career and with the developmental tasks portrayed in the child psychology literature.

Part 1: Constructing the Model

To order the variables in Super's structural model of the growth stage, the personality characteristics delineated in Erikson's (1963) model of psychosocial development during childhood were linked to the vocational development tasks of childhood outlined by Super. Time perspective connected with hope, locus of control linked with willpower, curiosity-key figures-exploration linked with purpose, and self-esteem connected with sense of competence. The linkages were readily apparent and easy to make. Linking Super's web model and Erikson's model of psychosocial development led to identification of four substages within the growth stage: confidence, control, convictions, and competence. In addition, a review of the literature on children's work behavior (Goodnow, 1988) helped to identify a sequence of four types of work behavior that coincides with the postulated substages in the

growth stage. Work behavior becomes more planned, independent, purposive, and realistic as the child masters the developmental tasks of the growth stage.

The four substages of the growth stage are conceived as themes, with periods of ascendance, rather than as tasks. Cochran (1992) asserted that developmental theories often confuse tasks and themes. Following Aristotle's (1980) usage, he differentiated between goals with a terminal point (tasks) from goals that are continuous (themes). For example, in criticizing the conceptualization of identity achievement as a developmental task Cochran wrote that "Forming an identity is not something that one can voluntarily just do, does not involve any definite point of closure, and is not explicitly specifiable. It is better conceived as a kind of general striving or theme that is voluntary and involuntary, continuous, and indefinite" (p. 190). The four developmental themes or striving postulated to characterize the growth stage in vocational development follow.

Substage 1: Developing Career Confidence

Developing a sense of career confidence in one's vocational future seems to be the first theme of the growth stage. Career confidence emerges from a future-oriented time perspective in Super's model and from hope in Erikson's model. A sense of career confidence results in a vocational attitude of aspiring, meaning a sustained optimism about the achievability of future goals. Career confidence and an aspiring attitude are shown in the work domain by looking forward to working and by enjoyment in watching other people do chores. Individuals who fail to develop a sense of career confidence seem to be persistently concerned with doubts and suspicions when they consider their work lives.

Substage 2: Developing Career Control

A sense of confidence in one's vocational future leads to concern about who owns that future. Thus the second theme of the growth stage seems to be developing a sense of control over one's vocational future. Career control emerges from internal locus of control in Super's model and from willpower in Erikson's model. A sense of career control results in a vocational attitude

called acceptance, meaning a willingness to begin to shoulder the responsibility for one's vocational future. Control and acceptance are behaviorally manifested in the work domain by learning to perform chores and tasks at home and at school. Individuals who fail to develop a sense of career control, and thus continue to rely upon other people to shape their vocational future, seem to be persistently concerned with dependency issues when they consider their work lives.

Substage 3: Developing Career Convictions

A sense of control over one's vocational future leads to concern with what to do with one's own future. Thus the third theme of the growth stage seems to be developing convictions about the meaning of work and its place in one's life. Career convictions emerge from curiosity, information, and identification with key figures in Super's model and from purpose in Erikson's model. Career convictions result in a vocational attitude of responsiveness, meaning responding to or answering the social expectation that one contribute to and cooperate with the community by preparing for, and eventually enacting, the work role. Convictions and responsiveness are behaviorally manifested in the work domain by helping other people with some chores. Individuals who fail to develop career convictions that appropriately respond to community expectations seem to be persistently concerned with only themselves and their own interests when they think about their work lives.

Substage 4: Developing Career Competence

Community-oriented career convictions lead to concern about developing adaptive work habits and attitudes. Thus the fourth theme of the growth stage seems to be developing a sense of competence or feeling equal to meeting the demands of one's vocational future. In this context, competence refers not to skill but to the feeling that one is sufficient to respond to what life expects. A sense of career competence emerges from self-esteem in Super's model and from competence in Erikson's model. A sense of competence results in a vocational attitude of diligence, meaning persevering and working with careful and steady effort. Competence and diligence are behaviorally

manifested in the work domain by performing solo chores. Individuals who fail to develop a sense of competence seem to be persistently concerned with self-perceived weaknesses and inadequacies when they consider their work lives.

Part 2: Using the Model to Generate Inventory Items

Based on the postulated four sequential themes of the growth stage, specifications for four psychometric scales were constructed. The scale specifications were in turn used to write items covering the themes in the growth stage. The final scales will each consist of ten items. The ACCI scales use only five items, yet ten items would be more desirable to increase the reliability of scales intended for a younger population who may respond to items less consistently. A much larger item pool, with which to conduct scale construction research, was prepared in the anticipation that empirical research would identify some items as unreliable or invalid for their intended use. The scale specifications and sample items from the item pool appear in the Appendix 1.

The original plan called for the four new scales to be combined with the three scales for the Exploration Stage from the Career Development Inventory, Adult Form II (CDI-A), a early precursor of the ACCI that included ten items per scale. Together, the seven ten-item scales would constitute the Student Career Concerns Inventory, applicable for use with students from junior high school through college.

Part 3: The First Study on Item Selection

This first empirical study, conducted with Dan Lewis and Walter Buboltz, evaluated the usefulness of the items with two samples of students. The first sample consisted of 228 students (63% female, 32% male, and 5% unidentified) enrolled in the Education and Mathematics Departments of a public university in the midwest. They had a mean age of 21.2 years, with 19% freshmen, 24% sophomores, 17% juniors, 24% seniors, 4% graduate students, and 11% unidentified. The second sample consisted of 200 eleventh and twelfth grade students, 25 males and 25 females from each of four high schools located in diverse communities. Combining the samples provided for heterogeneity of

developmental level among the 428 respondents to the item pool.

The students responded to the 92 items in Appendix 1, along with Holland's Vocational Identity Scale, Chartrand's Career Factors Inventory, Savickas' Choice Satisfaction Scale, and the CDI-A scales for crystallization, specification, implementation, and advancement.

To identify items from the pool for use in constructing a Research Form of the SCCI the following analyses were conducted: (a) item correlations to tentative scales, (b) item correlations to criterion scales, and (c) factor analysis of the item pool. Subsequently, the 92 items were examined for their correlations to their intended scales and criterion scales and for their factor pattern. In producing a research version of the SCCI, an item was eliminated from the pool for its intended scale if it (a) correlated less than .6 with that scale, (b) correlated higher with a different scale, (c) did not load on the predicted factor, or (d) did not correlate to relevant scales among the criterion measures. A few items were also removed because they correlated almost equally with two scales, even if the higher correlation coefficient was for the intended scale. In general, the items dealing with childhood work did not seem to load on the factors and most of them were eliminated from the pool. These procedures reduced the Concern pool from 18 to 11 items; the Control pool from 21 to 11 items, the Conviction pool from 31 to 12 items, and the Competence pool from 22 to 12 items.

Alpha factor analysis of the 92 items produced five factors with eigenroots greater than one, rather than the four factors that were anticipated. Three factors corresponded closely to constructs of Concern, Control, and Competence. However, the items written to measure the construct of Conviction produced two distinct factors. One Conviction factor consisted of six items that measure community orientation (rather than egocentricism). The items and their factor loadings follow:

Volunteering to help when needed. (.49)
Learning how to get along with all kinds of people. (.48)
Helping to resolve conflicts and settle fights. (.48)
Helping other people achieve worthwhile goals. (.43)
Being willing to teach things to other people. (.39)
Caring for younger children. (.35)

The second factor consisted of six items that dealt with self and occupational exploration. The items and their factor loadings follow:

Learning what occupations interest me. (.82)
Recognizing my strengths and weaknesses (.68)
Recognizing what values are most important to me. (.61)
Learning about the world of work. (.60)
Developing a real interest in some hobbies. (.52)
Identifying people that I would like to be like. (.52)

In reviewing the item-generating formula for the construct of Conviction, it became apparent that the definition of Conviction was too broad, including willingness to cooperate with and contribute to other people, formation of a sense of purpose in life, commitment to learn about and participate in life roles, a community orientation, and a beginning awareness that one must explore and eventually fit oneself into the world of work and the community. The two factors that resulted from the "Conviction" item pool seemed to measure the community orientation and occupational exploration dimensions in the definition. The first factor, measuring community orientation, seemed to focus on the content of helping people rather than a more general decentering from an egocentric to an allocentric perspective. The items in the second factor, intended to measure a exploration of and commitment to the work role, ended up looking like a measure of occupational exploration, with very high correlations to the CDI-A crystallization and specification scales. The results from this study indicated that construction of a Research Form of the SCCI required more preliminary to devise a better set of items to measure the Conviction construct.

Part IV: Reconstructing a Scale to Measure Career Convictions

The goal for the next study was to reconstruct the Conviction scale. The first step involved reconceptualization of the item-generating formula to concentrate on committing oneself to contribute to the community by participating in the work role. The proposed new scale addressed "achieving personal goals in social context" and was aimed to include both the achievement and affiliation aspects of community living. Effective items from the original Conviction item pool were retained and new items were written.

The 38 Conviction items were administered to a new sample. The 578

participants included 202 males, 336 females, and 40 not identified. All participants had indicated, as entering college freshmen, that they were undecided about their choice of major. They took the instruments during their freshmen orientation at their university. In addition to the new item pool for the Conviction theme, the participants responded to the shortened pool of Concern, Control, and Competence items; Holland's <u>Vocational Identity Scale</u>; and the CDI-A crystallization, specification, and implementation scales.

An alpha factor analysis was conducted on items written for the Concern, Control, Conviction, Competence items and the 30 items on the ACCI Exploration Stage Scale, ten each for crystallization, specification, and implementation. Although seven factors were expected, the results clearly indicated a fivefactor solution. Unexpectedly, the crystallization and specification items from the ACCI produced a single factor. This was not altogether surprising because, Super himself had commented about the problems in scaling specification and crystallization as distinct constructs. Interestingly the highest loadings on this factor (.75 or higher) were for the ten items that dealt with choosing or deciding, regardless of whether they came from the crystallization or the specification scale. Moreover, these same ten items were the only items that correlated .40 or higher with the Vocational identity Scale, the other ten were in the low to middle .30s. These results were quite disappointing because, they indicated that it might not be wise to use the existing CDI-A items to measure exploration themes of crystallizing and specifying. Further work is needed to construct crystallization and specification scales for the SCCI.

Although the 38 items in the Conviction item pool generally defined a distinct factor in the general factor analysis, a separate factor analysis was conducted on them. Alpha factor analysis, with equamax rotation, of the 38 revised items written to measure Conviction produced six factors with eigenroots greater than one. A scree test suggested three factors. The results for the six-factor solution follow.

Factor 1: (15 items)
Acting friendly. (.75)

```
Working as part of a team. (.73)
Cooperating with others to meet group goals. (.70)
                            (.70)
Playing my part on a team.
Getting along with all kinds of people.
Caring about the needs of other people.
                                           (.64)
Compromising with other people. (.63)
Cooperating with people on some group projects (.63)
Learning to be a good listener. (.61)
Finding friends who encourage me. (.60)
Contributing my share to group efforts. (.60)
Developing a strong interest in some hobbies.
Becoming less self-centered. (.50)
Helping resolve conflicts and settle fights. (.48)
Acting in the best interests of other people.
Factor 2: (12 items)
Clarifying what I want out of life. (.78)
Committing myself to reaching my goals. (.77)
Identifying goals for myself. (.73)
Taking my own goals seriously. (.72) Recognizing good opportunities. (.68)
Expending effort to be successful. (.67)
Realizing that my work affects other people. (.54)
Discovering my own style. (.51)
Forming long-term relationships with people. (.50/.48 on factor 1)
Recognizing what values are most important to me. (.45)
Learning about the value of work. (.40)
Increasing my common sense.
                              (.38)
Factor 3: (4 items)
Teaching things to other people. (.78)
Helping other people achieve worthwhile goals. (.74)
Caring for younger children. (.67)
Volunteering to help when needed.
Factor 4: (3 items)
Taking orders from other people. (.73)
Finding role models to admire. (.55)
Involving other people in my projects. (.53)
Factor 5: (2 items)
Following advice about how I should do things. (.81)
Following advice about what I should do. (.80)
Factor 6: (2 items)
Doing better than my friends. (.78)
Achieving more than other people. (.79)
```

The first two factors seem to measure a community orientation and commitment to goals. The third factor appears to measures altruistic values or interest in social occupations. The last three factors appear to be defined by too few items and overly specific in dealing with advice and competition. Accordingly, attention focused on how the items in the first two factors correlated to scores for the <u>Vocational Identity Scale</u> (VI). All of the items in the second factor, goal commitment, correlated significantly (.10)

or higher) with VI. The correlations ranged from .11 to .36.

Commitment to Goals (correlations with VI in parentheses)
Clarifying what I want out of life. (.36)
Committing myself to reaching my goals. (.16)
Identifying goals for myself. (.30)
Taking my own goal seriously. (.18)
Recognizing good opportunities. (.20)
Expending effort to be successful. (.16)
Realizing that my work affects other people. (.15)
Discovering my own style. (.22)
Forming long-term relationships with people. (.13)
Recognizing what values are most important to me. (.12)
Learning about the value of work. (.11)
Increasing my commonsense (.11)
Contributing my share to group efforts (.13)
Finding friends who encourage me. (.11)

Only four of the 15 items in the community orientation factor correlated with VI, ranging from .10 to .17. Of these four, three had secondary loadings of .30 or .35 on the goal commitment factor: contributing my share to group efforts (r with VI = .13), finding friends who encourage me (r with VI= .11), and developing a strong interest in some hobbies (r with VI=.17). The other item, did not have a loading on the commitment factor, was cooperating with people on some group projects (r with VI=.10)

Based on these results, I constructed two separate 12-item scales to correspond to commitment to goals and community orientation. In looking at the results, however, it appears that the goal commitment scale probably should be the one used to measure Career Conviction in the SCCI. Yet, there may be merit in including both scales in the SCCI. Another study was conducted to examine this issue empirically.

Part V: Comparing Goal Setting and Community Orientation as Measures of Career Conviction

Whether or not to include two scales to measure Career Convictions presented an impasse. On the one hand, the two scales could reflect both achievement and affiliation in forming a sense of purpose beyond the pursuit of narcissistic supplies. On the other hand, using two scales overemphasizes this theme. The choice between one or two scales was empirically examined, in a study with Walter Buboltz, by correlating the scales to a new criterion.

The prior study indicated how the scales related to vocational identity, the endpoint of the continuum being measured by the SCCI. Thus, this study used a criterion directly related to Conviction, namely commitment to life roles.

The <u>Salience Inventory</u> was used to measure commitment to the roles of student, worker, leisurite, family member, and community member. 166 community college students responded to the same 92 items as in study 4 along with the 50 items in the <u>Salience Inventory</u> commitment scales. The following items had significant (r=.16) correlations with SI scales.

Goal Commitment Items (correlations with role commitment scales in parentheses; S=study, W=work, L=leisure, H=home, and C=community)

Committing myself to reaching my goals. (W=.21, H=.17) Identifying goals for myself. (S=.16, W=.19) Taking my own goals seriously. (S=.16. W=.17) Realizing that my work affects other people. (W=.20) Contributing my share to group efforts. (S=.19, W=.29, H=.18) Finding friends who encourage me. (W=.17, L=.23) Discovering my own style. (L=.16)

Community Orientation Items

Working as part of a team. (W=.26)Cooperating with others to meet group goals. (S=.24, W=.35, H=.20)Playing my part on a team. (W=.30)Caring about the needs of other people. (S=.18, W=.21)Acting in the best interests of other people. (W=.24, C=.17)Compromising with other people. (W=.16)Cooperating with people on some group projects ((S=.18))Becoming less self-centered. (L=.25)

These results suggest that items from both factors correlated to commitment to the work role. The items seemed to measure goal orientation and work style as well as reflect "achieving personal goals in social context," the original item-writing definition for these items. Thus, a new Career Conviction scale was constructed for further research.

Committing myself to reaching my goals.

Identifying goals for myself.

Taking my own goal seriously.

Realizing that my work affects other people.

Increasing my commonsense.

Finding friends who encourage me.

Working as part of a team.

Cooperating with others to meet group goals.

Playing my part on a team.

Caring about the needs of other people.

Compromising with other people.

Acting in the best interests of other people.

Having, at least temporarily resolved the problem in constructing a Conviction scale, attention turned to constructing scales to measure crystallization and specification.

Part 6: New Crystallization and Specification Scales

New items were written to measure crystallization and specification.

The crystallization items consisted of six items to measure self-exploration and six items to measure occupational exploration. Together, the twelve items should indicate progress in forming tentative preferences for a few occupational fields. The specification items consisted of six items to measure deciding upon a particular occupational choice and six items to measure commitment to that choice. Together the twelve items should indicate progress in committing oneself to an occupational choice. It is hypothesized that the crystallization and specification scales will correlate strongly to measures of exploration and commitment in the formation of ego identity. At the least, the 24 items as a group should index progress in forming and articulating a clear and stable vocational identity.

Conclusion

At this point in time, we now have prepared a Research Form of the SCCI that contains six twelve item scales to measure concern, control, conviction, competence, crystallization, and commitment. The next steps are to reduce the scales to ten items each and the begin the construct and concurrent validity studies.

References

- Aristotle (1980). <u>The nichomachean ethics</u> (translated by D. Ross). Oxford: Oxford University Press.
- Buhler, C. (1933). <u>Der menschliche Lebenslauf als pscyhologisches Problem</u>. Leipzig: Herzel.
- Cochran, 1. (1992). The career project. <u>Journal of Career Development, 18,</u> 187-197.
- Erikson, E. H. (1963). <u>Childhood and society</u> (2nd rev. ed). New York: Norton.
- Ferreira Marques, J., & Duarte, M. E. (1992, July). Career concerns and values in employed adults. In K. H. Seifert (Chair), <u>Assessment of career concerns in students and adults</u>, 25th International Congress of Psychology, Brussels.
- Havinghurst, R. J. (1953). <u>Human development and education</u>. New York: Longman's Green.
- Miller, D. C. & Form, W. H. (1951). <u>Industrial Sociology</u>. New York: Harper and Row.
- Savickas, M. (1984). Construction and validation of a physician career development inventory. <u>Journal of Vocational Behavior</u>, <u>25</u>, 106-123.
- Savickas, M., Super, D., & Thompson, A. (1983). Medical Career Development Inventory. Rootstown, OH: NEOUCOM.
- Super, D. E., Crites, J. O., Hummel, R. C., Moser, H. P., Overstreet, P. L., & Warnath, C.F. (1957). <u>Vocational development: A framework for research</u>. New York: Teachers College Press.
- Super, D. E. (1983). Assessment in career guidance: Toward truly developmental counseling. <u>Personnel and Guidance Journal</u>, <u>61</u>, 555-562.
- Super, D. E. (1985). Coming of age in Middletown: Careers in the making. American Psychologist, 40, 405-414.
- Super, D. E. (1990). A life-span, life-space approach to career development in D. Brown & L. Brooks (Eds.) <u>Career Choice and Development</u> 2nd ed., (pp. 197-261). San Francisco: Jossey-Bass.
- Super, D. E., Thompson, A.S., & Lindeman, R. H. (1986). <u>The Adult Career Concerns Inventory</u>. Palo Alto, CA: Consulting Psychologists Press.
- Super, D. E., Zelkowitz, R. S., & Thompson, A.S. (1975). <u>Manual for the Career Development Inventory</u>, <u>Adult Form</u>. New York: Teachers College, Columbia University.
- Tétreau, B., DuPont, P., & Gringas, M. (1992, July). A French-Canadian adaptation of the Adult Career Concerns Inventory. In K. H. Seifert (Chair), <u>Assessment of career concerns in students and adults</u>, 25th International Congress of Psychology, Brussels.

Appendix

Item Pool for Four Developmental Tasks of the Growth Stage

Task/Scale 1: Develop Career CONFIDENCE Negative Outcome: Career DEPRESSION

Vocational Attitude: Aspiring

Work Behavior: Watch other people do chores

This scale purports to measure optimism, planfulness, future orientation, temporal continuity, and attachment to significant others. High scores indicate a sense of confidence in future career. Low scores indicate a sense of pessimism that may thwart the development of a subjective career and future orientation.

Sample items:

- 1. Understanding that preparing for the future is important.
- 2. Realizing that someday I will have to support myself.
- 3. Planning out how to do important things before I start them.

4. Making plans to achieve my goals.

- 5. Thinking about what the future will be like.
- 6. Learning when and how to count on other people.
- 7. Knowing that as a human being, I count and that I am important.
- 8. Making the best of bad situations.
- 9. Connecting my present situation with what I have done in the past.
- 10. Feeling optimistic about achieving my goals.
- 11. Feeling welcome at home, at school, and in the neighborhood.
- 12. Trusting my own feelings when making a choice or decision.
- 13. Expecting the future to be good.
- 14. Realizing that today's choices affect my future.
- 15. Following directions.
- 16. Practicing good health habits.
- 17. Dressing and grooming appropriately for each situation.
- 18. Seeing connections between choices of school courses and future jobs.

Task/Scale 2: Develop Career CONTROL Negative Outcome: Career DEPENDENCY Vocational Attitude: Acceptance Work Behavior: Learn chores

This scale purports to measure autonomy, realism, assertiveness, effort attributions for success, decisional attitudes, and self-responsibility. High scores indicate a sense of self-control and agency achieved through autonomous decision making, self-discipline, impulse control, and assertiveness. Low scores indicate dependence upon other people and luck, problems in impulse control, and poor self-management skills.

- 1. Working hard today for pay-off tomorrow.
- 2. Shaping my future by what I do today.
- 3. Realizing that success comes from thoughtful effort.
- 4. Recognizing that the harder I work, the "luckier" I get.
- 5. Seeing that in every situation there are alternatives and choices.
- 6. Assuming responsibility for my own actions.
- 7. Learning to be patient and persistent.
- 8. Making decisions for myself.
- 9. Learning to think before I act.
- 10. Expressing anger appropriately.
- 11. Sticking up for my beliefs.
- 12. Differentiating between fair and unfair rules.
- 13. Learning to count on myself.
- 14. Learning to balance ambition and creativity.

- 15. Being able to keep playful attitude while working.
- 16. Trying to do my best when working.
- 17. Trying to get along with other people.
- 18. Making my grades in school reflect my ability and effort.
- 19. Handling frustrations and conflicts that occur at home, school, and work.
- 20. Recognizing when failure is because of lack of effort.
- 21. Recognizing that boredom is a sign that something is wrong in oneself or in the situation.

Task/Scale 3: Develop Career CONVICTIONS/CONCEPTS

Negative Outcome: Career EGOISM Vocational Attitude: Responsiveness

Work Behavior: Help other people with chores

This scale purports to measure views about the meaning of life, willingness to cooperate with and contribute to other people, and formation of a sense of purpose in life. High score indicate a commitment to learn about and participate in life roles, a community orientation, and a beginning awareness that one must explore and eventually fit oneself into the world of work and the community. Low scores indicate a willfulness aimed at maintaining excessive autonomy, avoiding connection to the rules and roles of the community, and a continued self-focus in thinking and choosing.

- 1. Being active in the community.
- 2. Helping family members with household chores.
- 3. Caring for younger children.
- 4. Being willing to teach things to other people.
- 5. Helping other people achieve worthwhile goals.
- 6. Volunteering to help when needed.
- 7. Learning how to get along with all kinds of people.
- 8. Thinking about what I want out of life.
- 9. Talking with parents and teachers about the meaning of life.
- 10. Keeping a sense of humor at work and play.
- 11. Helping resolve conflicts and settle fights.
- 12. Learning to work first and play later.
- 13. Being aware of my personal traits and how other people see me.
- 14. Learning about the world of work.
- 15. Recognizing what values are most important to me.
- 16. Cooperating with people on some group projects.
- 17. Using my imagination to explore the future.
- 18. Traveling and finding out about new places and things to do.
- 19. Developing a real interest in some hobbies.
- 20. Earning money, in work in which self-expression is possible.
- 21. Finding a group of friends who encourage me.
- 22. Knowing about people like me who have succeeded in life.
- 23. Identifying people that I would like to be like.
- 24. Showing some initiative.
- 25. Learning to be a good listener.
- 26. Using good judgment.
- 27. Working as part of a team.
- 28. Getting along with other people.
- 29. Learning what occupations interest me.
- 30. Recognizing my strengths and weaknesses.
- 31. Visiting work places to watch what people do in various jobs.

Task/Scale 4: Develop Career COMPETENCE Negative Outcome: Career DISCOURAGEMENT

Vocational Attitude: Diligence

Work Behavior: Performing solo chores

This scale purports to measure a sense of industriousness, work-related self-esteem, and work habits and attitudes. High scores indicate a sense of

competence and confidence as a worker and work-role salience. High scores indicate adaptive attitudes toward work, good work habits, and stable selfesteem. Low scores indicate problems in self-evaluation and hesitancy in committing self to the work role.

- Working up to my ability in school or on my job.
- Developing good work habits and attitudes.
- Doing my share of household chores.
- Sticking with chores or school work until finished.
- Feeling pride in a job well done.
- 6. Efficiently performing my chores.
- Saving and spending money wisely.
- Working some outside the home.
- Being conscientious -- doing things well.
- 10. Being dependable -- doing what I say I will do.
- 11. Enjoying learning new skills.
- 12. Enjoying using skills that make me productive and valued.
- 13. Learning from mistakes and going on to do a better job.
- 14. Risking the mistakes in worthwhile activities and learning from them.
 15. Accepting myself and my imperfections, knowing that I can overcome them.
- 16. Getting busy and staying busy, or using idleness constructively.
- 17. Cooking a complete meal.
- 18. Washing and ironing my own clothes.
- 19. Showing self-confidence without being cocky.
- 20. Being able to learn.
- 21. Trying to do quality work, regardless.
- 22. Beginning to think how my interests might be relevant in occupations.