



# Early Beyond-the-Self Purpose and Later Life Psychological Well-Being

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**Scholarly Report submitted in partial fulfillment of the MD Degree at Harvard Medical School**

**Date:** 27 January 2017

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**Scholarly Report Title:** Early Beyond-the- self Purpose and Later Life Psychological Well-being

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## **TITLE: Early Beyond-the-self Purpose and Later Life Psychological Well-being**

Amy Le, BA, Robert J. Waldinger, MD

**Purpose:** This study investigates whether beyond-the-self purpose established in early adulthood is associated with psychological well-being in mid to late life (ages 50-70).

**Methods:** From 1939 to 1942, 268 Harvard College sophomores were selected to participate in the Study of Adult Development (Heath, 1945). The summary of each participant's intake interview was analyzed and the presence of purpose was determined using a reliable coding system which identified a goal, actions taken to achieve that goal, and the degree to which the goal was of consequence beyond the self. The participants' lives were followed closely for over 75 years and documented through questionnaires administered every two years, physical exams every 5 years, and interviews every 15 years which provided a wealth of information including the participants' psychological adjustment to aging, alcohol use, involvement in social organizations, commitment to volunteer or charity work, church attendance, and income.

**Results:** Of the 268 participants, 77 developed beyond-the-self purpose in college, 145 lacked beyond-the-self purpose in college, and 46 had insufficient information to determine whether or not they had beyond-the-self purpose in college. Men who manifested beyond-the-self purpose during college were rated by research staff over 40 years later as having a better adjustment to aging between the ages of 50 to 65 ( $t=2.37$ ,  $p=.02$ ), were involved in more social organizations between the ages of 50 and 70 ( $t=2.09$ ,  $p=.04$ ), and used alcohol less frequently as reported at age 53 ( $t=2.13$ ,  $p=.04$ ). The two groups did not differ in their commitment to volunteer or charity work, church attendance, or income in mid to late life.

**Conclusions:** Findings confirm the hypothesis that development of beyond-the-self purpose in early adulthood is associated with greater psychological and social well-being decades later. Sharper focus on the development of purpose can move the field beyond the current catalogue of general psychological factors associated with midlife and late life health toward an understanding of specific factors that explain these links and may be targets for effective intervention that promote healthy aging.

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### **Student Contribution:**

My research advisor, Dr. Robert Waldinger, and I designed this research project. My role in this study was to review all relevant documents (e.g., interview summaries, questionnaires) of the 268 participants in the original Harvard Study of Adult Development to determine which individuals had evidence of purpose during their early college years. I developed a codebook based on a coding process used in the Youth Purpose Project (Malin 2014) to further organize the concept of purpose into three dimensions or variables: 1) driving intention: presence of a stable, future-oriented goal; 2) action: evidence of meaningful engagement in activities to realize the goal; 3) orientation: signs of the individual's desire to connect with and contribute to something beyond himself, based on categories and domains of purpose. The codebook also ensured that my research assistant and I were in agreement on the 20% of cases which we coded in common. I then reviewed documents in the men's mid and late life to abstract information related to the dependent variables including psychological adjustment, alcohol use, social involvement, charity, volunteer work, and income. I performed all statistical analyses using IBM SPSS® to determine any associations between early beyond-the-self purpose and later-life well-being. I then presented our findings at the annual Soma Weiss Research Day in 2015 and served as primary author of the manuscript.

### **Introduction:**

Within the field of developmental psychology, and particularly positive youth development, there is increasing interest in understanding the concept of purpose. Purpose has been shown to be associated with greater levels of happiness (French 1999), resilience (Bernard 1991), pro-social behaviors (Butler 1968), religiosity (Lerner et al. 2008), psychological well-being (Ryff 1989; Hutzell et al. 1994; Jeffries 1995), and life satisfaction (Bronk 2009). Additionally, purpose has been associated with lower levels of drug use (Noblejas de la Flor, 1997; Padelford, 1974) and alcoholism (Schlesinger et al. 1990; Waisberg et al. 1994). However, the majority of research on purpose, though promising, has been limited to cross-sectional data or short-term effects. Thus the question of whether purpose developed in adolescence or early adulthood can reach across decades to impact mid- and late life has not been sufficiently addressed. A natural next step in this line of research is to address the long-term outcomes of purpose developed in early life. Our study uniquely addresses this problem by incorporating prospectively-collected,

longitudinal information spanning over 40 years to analyze the links between purpose developed in early adulthood and later psychological wellbeing. Knowledge generated by this research will inform the design of more effective interventions that can be implemented in early life to promote better health and well-being for millions of people as they age.

In reviewing research on the topic of purpose, multiple definitions arise. As early as 1959, Viktor Frankl used meaning and purpose interchangeably to describe an “inner strength” which motivates a person’s life. Similarly, Carol Ryff (1989) suggests that an individual with purpose “has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; has aims and objectives for living.” In our research project, beyond-the-self purpose is defined using William Damon’s operational definition of purpose as a “stable and generalized intention to accomplish something that is at once meaningful to the self and of consequence to the world beyond the self,” which incorporates three key components: 1) purpose is a stable and far-reaching goal; 2) purpose is directed at an accomplishment towards which one can make progress; 3) purpose is part of a person’s internal sense of meaning but also has an external component involving a desire to make a difference in the world (Damon 2003).

### **Method:**

#### ***Sample***

The Study of Adult Development is comprised of a cohort of 268 Caucasian male Harvard College sophomore students who entered the Study between 1939 and 1942. The sample was selected by undergraduate deans and physicians at Harvard University Health Services for participation in an intensive multi-disciplinary study of health and development. Selection criteria for the original study included the absence of physical and mental health problems during a medical examination at college entrance and satisfactory freshman academic record. At baseline, participants were interviewed by research staff members including psychiatrists, internists, physiologists, social workers, and anthropologists over the course of eight to ten visits (Valliant, 1977). The research staff recorded observations based on physiological data and eight hours of open-ended interviews focused on the participant’s family and his own career plans and value system. Following these initial evaluations, participants were re-interviewed at ages 25, 30,

and 50. Additionally, starting at age 45 the participants began completing mailed questionnaires every 2 years and physical examinations every 5 years. Questionnaires asked about topics such as employment, family, health, habits, and political views. Of the original 268 men, 12 dropped out after college and 6 died in World War II; these respondents were not included in the analyses. Thus, records for 250 men were rated for the presence or absence of beyond-the-self purpose.

## ***Measures***

### *Beyond-the-self Purpose*

All three features of Damon et al.'s (2003) conception of purpose were required for a participant to be coded as having beyond-the-self purpose in college. Participants who did not have a life goal, did not make plans to accomplish their goals, or whose life goal was focused on the himself rather than others was coded as lacking beyond-the-self purpose in college.

First, two coders (the first author and an undergraduate research assistant) read the complete age 19 intake interview summary written for each participant and determined whether or not the participant identified a meaningful goal. Secondly, the coders determined whether participants had past, present, or future plans to engage in actions to pursue their goals. Lastly, the coders judged whether or not the goal pertained to positively impacting the external world in some way. The two coders coded 20% of records in common ( $n=54$ ) and showed good agreement on the presence or absence of purpose ( $\kappa=.79$ ,  $p<.01$ ). For the remaining 80% of interviews, the first author coded each interview account. Coding was based on a coding manual developed by the first author based on the coding process used in the Youth Purpose Project (Malin 2014) to ensure uniformity of coding procedures (see Appendix 1).

### *Psychological adjustment age 50-65*

Psychological adjustment refers to the ability of participants to maintain a state of psychological balance in the face of difficulties. This psychological adjustment score was calculated based on the sum of several participant self-reported variables that Valliant et. al demonstrated correlated highly with adult adjustment and psychiatric illness. The men were rated on ten variables for mental health in late midlife as follows. Four items ([1] occupational decline; [2] less than three

weeks' vacation; [3] over five days' annual sick leave; [4] limited recreation with others) were scored as 2, true and 1, untrue. The six other items and point assignment were as follows: (5) Career and/or retirement dissatisfaction and (6) marital dissatisfaction were scored 3, clear; 2, ambiguous; and 1, absent; (7) tranquilizer use scored 1, less than five days; 2, five to 30 days; 3, over 30 days; (8) psychiatrist use scored 1, no visits; 2, one to ten visits; 3, over ten visits; (9) employment after age 60 scored 1, full-time work; 2, part-time; 3, early retirement; and (10) poor subjective adjustment to aging scored 1, excellent; 3, ambiguous; and 5, clearly unhappy. The ratings were drawn from questionnaires administered in 1970, 1972, 1975, 1977, 1979, 1981, 1983, and 1985, thus reflecting an assessment of participants' psychosocial adjustment over time, approximately between the ages of 50 and 65. Scores ranged from 10 to 27. Men in the worst quartile (19 to 27 points) were categorized as "poor adjustment." Rater reliability was .82 (Pearson  $r$ ) and .72 (Kendall's tau  $c$ ). The ratings of adjustment were based on mental health and adjustment to aging where a low score of 1 corresponded to "feels worse than most men," a score of 3 corresponded to "feels the same as most men," and a high score of 5 corresponded to "feels better than most men."

#### *Alcohol use up to the age of 53*

Participants' alcohol use up to the year 1973 was recorded in a series of questionnaires administered in 1964, 1967, 1970, and 1972 (Valliant 1995). Participants indicated the average number of drinks that they consumed per week, stated any life problems related to their alcohol use, and answered yes or no to the following questions: 1) some people feel I drink more than is good for me, 2) my wife feels I drink more than is good for me, and 3) I feel I drink more than is good for me. Possible alcohol use ratings were Virtual Teetotaler (less than 2 drinks/week), Social Drinker (2-13 drinks/week), Heavy Social Drinker (14-28 drinks/week for past decade or >70g ethanol/day for less than 5 years, answered "yes" to at least one of the ABC questions); Damage Due to Alcohol (>70g of alcohol/day for more than 5 years, "yes" to all 3 questions, personally feels that alcohol use is out of control, and more than three alcohol-related problems).

#### *Social Involvement age of 50-70*

In questionnaires administered between 1970 and 1990, participants reported on their involvement in social organizations. Participants were assigned a rating that ranged from 0 (no



social involvement) to 2 (active participation in a social club) indicating their level of social activity.

#### *Charity at ages 50 and 65*

In questionnaires administered in 1975 and 1990, participants reported the dollar amount they gave to charitable causes within the last year.

#### *Volunteer work at ages 50 and 65*

In questionnaires administered in 1975 and 1990, participants reported the number of hours they spent volunteering per week at age 50 and 65.

#### *Income at ages 55, 65, and 70*

In questionnaires administered in 1977, 1988, and 1993, participants reported their annual earned income in dollars at age 55, 65, 70.

### **Results:**

We first examined the prevalence of beyond –the-self purpose in our sample of 268. Seventy-seven cases (about 29%) were rated as having beyond-the-self purpose. One hundred forty-five (54%) were labeled as lacking beyond-the-self purpose. Forty six cases (17%) had insufficient information to determine whether or not they had beyond-the-self purpose (Figure 1). The following interview summary excerpts illustrate each category of purpose.

#### *No Beyond-the-self Purpose cases*

Case 1: “There really are no definite plans for the future, and the boy rationalizes this indecision by saying that there are many fellows here at Harvard who are in the same boat... He has the attitude of just drifting through college and getting grades and not working very hard for them.”

Case 2: “He wants above all to have a fairly large income in order to be able to travel and to buy good clothes and to be able to live in a style that would satisfy him...He says that he will probably not marry because marriage would necessitate a giving-up of a freedom to travel and would bind him financially with obligations that would restrict his manner of life.”

### *Beyond-the-self cases*

Case 3: “He states he has decided to go into government sort of some sort, and is especially interested in social problems. The boy stated that he himself is interested in people and in their problems, and would like to enter some sort of a life work to help other people.- He states that like his father, he is not very interested in social prestige or dignity.”

Case 4: “He is going to major in sociology and made up his mind to go into social work last spring. He was influenced by finding that he liked doing work for the Phillips Brooks House... He said he wanted to be a social worker because it would enable him ‘to help give a break to somebody who really needed it.’ He has a general philosophy of life that if anybody can be made sufficiently happy, he can be made into a reasonably good citizen.”

### ***Statistical analyses and findings***

The associations between purpose established in early adulthood and various measures of psychological well-being in mid and late life (ages 50-70) were examined via a series of independent samples t-test using IBM SPSS®. Men who manifested purpose during college were rated by research staff over 40 years later as having a better psychological adjustment between the ages of 50 and 65 ( $t=2.37$ ,  $p<.05$ ), were involved in more social organizations between the ages of 50-70 ( $t=2.09$ ,  $p<.05$ ), and used alcohol less frequently as reported at age 53 ( $t=2.13$ ,  $p<.05$ ). Contrary to hypotheses, the two groups did not differ in their commitment to volunteer work, charity contribution, or income in mid to late life (Table 1).

### **Discussion:**

The majority of research pertaining to purpose has been limited to cross-sectional studies or short-term follow-up. Using rare longitudinal data spanning late adolescence to midlife, our study adds to the literature by examining associations between purpose developed in early adulthood and psychological well-being, alcohol use, social involvement, charity, volunteer, and income.

Our study demonstrated that participants who had evidence of purpose during their college years had better psychological adjustment to aging between the ages of 50 and 65. This result is in line with research which suggests that college students who develop a sense of purpose report higher

levels of perceived personal development and self-efficacy (Hill 2010; Dewitz, Woolsey, & Walsh 2009), better psychological and physical health (Antonovsky 1987), and greater subjective sense of well-being (McAdams, 2001; Keyes, Shmotkin, & Ryff, 2002). For example, a study of 416 college undergraduate students found that the college students who displayed prosocial orientation were more likely to have higher levels of generativity, personal growth, purpose, and integrity over a decade later (Hill 2010).

We also found that individuals who developed purpose in college were more involved in social organizations between the ages of 50 and 70 and used alcohol less frequently as reported at age 53. This is consistent with prior research which shows that lack of purpose has been shown to be correlated with drug involvement (Noblejas de la Flor, 1997; Padelford, 1974), participation in risky and antisocial behaviors (Sappington & Kelly, 1995; Sayles, 1994), aggression (Shek, Ma, & Cheung, 1994), and alcoholism (Schlesinger, Susman, & Koenigsner, 1990; Waisberg & Porter, 1994).

Lastly, the two groups in our study did not statistically differ in their commitment to volunteer work, contributions to charity, or income in mid to late life. This is contrary to some other studies that have found that a perceived sense of purpose is linked with commitment to social action and political activism (Butler, 1968; McAdams, 2001), higher income (Zeitchik, 2000), increased church attendance (Francis & Burton, 1994). Of note, these studies, like the majority of research assessing purpose are limited to cross-sectional studies analyzing the presence of purpose at one point in time and the various variables also collected during that same point in time. The difference in study design could explain why this current study which assesses the links between college years and midlife did not find a statistically significant difference.

To better understand our findings, it is important to note that the process of developing purpose is not necessarily linear; research suggests that individuals can lose and regain purpose throughout their lifespan. For example, Heather Malin (2014) has demonstrated this fluctuation over the course of adolescence. She has found that early adolescence is a time during which young people can begin to demonstrate an “orientation” towards purpose by showing an inclination towards prosocial behaviors. Subsequently, during middle adolescence, this beyond-the-self orientation can be shaped into a “role” in which young people learn to integrate their desire to contribute to society with their own personal interests and abilities. Then in late

adolescence, young people continue through a period of “reevaluation” as the trajectory of their beyond-the-self is influenced by life transitions, identity formation processes, and external social supports (Malin 2014). In addition to the turbulence inherent in emerging adulthood, our study participants also had a major historical event occurring during this important time of development—World War II. As such, the possibility of external factors impacting the development and maintenance of individual’s beyond-the-self purpose is highly plausible. For example, it is possible that a participant who had evidence of beyond-the-self purpose, based on his intake interview, experienced subsequent life events and hardships, such as the war, which altered his priorities and purpose. Alternatively, a young adult who does not demonstrate a sense of purpose at age 20 could have the support from family or peers to encourage the attainment of purpose later in life. To better understand the predictive value of early beyond-the-self purpose for mid- and late-life outcomes, we would ideally have repeated measures of purpose at multiple stages of participants’ lives. Thus future research should reassess purpose and multiple stages of an individual’s life and analyze the effect of potential modifiers such as major life changes (e.g., war, death of loved ones, divorce, etc.) and support systems.

Findings from this study highlight the importance of the early development of purpose, as it can have major implications for mid- and late-life outcomes. Research in the field of developmental psychology suggests that all young people are capable of developing life purposes. Purpose is not restricted to certain genders, ethnic groups, or socioeconomic backgrounds (Damon 2009; Benson 2006). Thus parents can help their children develop early beyond-the-self purpose by maintaining positive childhood environments, modeling ways to contribute to society, and encouraging active participation in valued community roles (Mariano et al. 2012; Benson 1998). Additionally, it is important to continue cultivating and nurturing individual’s sense of purpose throughout their lifespan, possibly through structures service-learning programs implemented in high school or college curricula to provide students with opportunities to develop prosocial goals and thus have a positive influence on adult development (Brandenberger, 1998; Pascarella, Ethington, & Smart, 1988; Pascarella & Terenzini, 2005).

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### **Figures and Tables**

Figure 1. Distribution of purpose in study sample



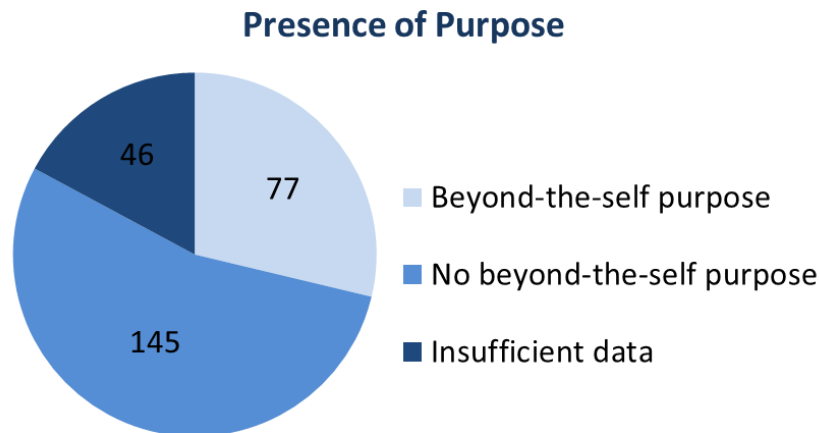


Table 1. Means and standard deviations for psychological well-being variables by presence of purpose

Beyond-the-self purpose (n=77), No beyond-the-self purpose (n=145), Insufficient data (n=46).

|                             | Beyond-the-self purpose |          | No Beyond-the-self purpose |          |
|-----------------------------|-------------------------|----------|----------------------------|----------|
|                             | M                       | SD       | M                          | SD       |
| Psychological adjustment    | 3.42*                   | .87      | 3.16*                      | 1.09     |
| Alcohol use                 | 2.35*                   | 1.65     | 2.96*                      | 2.05     |
| Social involvement          | 1.11*                   | .6       | .92*                       | .59      |
| Charity                     | 6427.15                 | 13505.24 | 5284.22                    | 12149.31 |
| Volunteer                   | 2.21                    | 2.61     | 2.16                       | 2.93     |
| Income                      | 105.2                   | 95.56    | 101.99                     | 91.05    |
| *significant t-test (p<.05) |                         |          |                            |          |

#### **Appendix 1: Codebook for determination of presence of beyond-the-self purpose**

Purpose: a stable and generalized intention to accomplish something that is meaningful to the self and leads to engagement with some aspect of the world beyond the self.

- A goal that is stable and far-reaching

- Directed at an accomplishment towards which one can make progress; provides sense of direction
- Part of one's personal search for meaning but also has external component ie. prosocial intention to contribute to matters larger than the self

***Relevant Documents:***

While reading through the interviews and questionnaires, pay close attention to: 1) any mention of guiding morals, goals, or obligations; 2) any past, present, or future plans to pursue these goals; and 3) whether the goals benefit the participant, others, or both.

- **Subject Interview (Red Folder)**
  - Quickly read through the interview to get a sense of the person and what is most important to him
  - Look for:
    - any mention of guiding morals, future goals, or obligations
    - any past, present, or future plans to pursue these goals
- **Social History From Subject (Red Folder)**
  - Look at:
    - summer activities
    - accomplishments
    - extracurricular activities
- **Graduate Information Sheet (Blue Folder)**
  - Look at:
    - Section I, Question 6b: What factors in your work do you find stimulating, interesting, and absorbing?
    - Section I, Question 10: Relative importance of life work to other activities, plans, and interests.
    - Section I, Question 11: Nature of any recent conflicts about career.
    - Section VII, Question 2: In the past year, has your viewpoint changed fundamentally about any of the following.

- Section VII, Question 3: Have you any personal problems or emotional conflicts?
- **Grant Study 1947 Questionnaire (Blue Folder)**
  - Look at:
    - Section 1, Question 4: What circumstances, ideas or influences led to choosing this type of work?
    - Section 1, Question 5: Other remarks. Is it your permanent choice of career? Have you any other occupations?
    - Section VI, Question 1: Note any special events or changes in your personal situation or affairs not covered by the above (eg. Special honors or degrees; languages learned; articles, stories or books published; special skills or interests acquired in any field of thought or activity)
    - Section VI, Question 2: Have you become aware of any particular changes in yourself wrought by the war years, which you haven't communicated to us in the War Service questionnaire sent in 1946? (Those not in the armed services during the war were not sent such questionnaires, so if this were the case, please give full answers)
    - Section VI, Question 3: Please note any change in personal philosophy or religious attitude, that you think may not have been covered by previous questionnaires.
    - Section VI, Question 4: Have you any personal problems or emotional conflicts (including sexual)?
- **Grant Study Follow-up 1946 Questionnaire (Blue Folder)**
  - Look at:
    - Section II, Question 2: Now that it is over, what effect has the war had upon you? Are you the same man who went into uniform or are you different, and if so, specifically in what way? What changes in your general outlook on life, especially in your religious beliefs, and ethical and moral standards have occurred? What is your present opinion as to what the world owes you and you it, and if this a changes from view formerly had?

- **10-year Summarizing Statement (Blue Folder)**

- Quickly read through the summary to identify any guiding morals, future goals, or obligations not previously mentioned

### *Variables*

- **Driving Intention**

- Combining information from all documents, determine whether or not there is a goal which the participant identifies as important.
- To determine where or not this goal is a driving force in the person's life, see if:
  - The person envisions a future involving this goal
  - The person makes plans in order to accomplish the goal
  - The person's current actions reflect a consistent effort to pursue the goal
- Also keep in mind:
  - How the person talks about their goal (frequency, level of passion, etc.)
  - The role that it plays in their dreams, plans, and actions
- **Code:**
  - 0=absent
  - 1=present

- **Category of Purpose**

- If the participant has a driving intention, determine which category it falls into. The categories are broad concepts that capture many of the more specific types of goals and activities that young people talk about as important.
- **Code:**
  - 1=help others
  - 2=serve God/a Higher Power
  - 3=make the world a better place
  - 4=change the way people think
  - 5=create something new
  - 6=make things more beautiful
  - 7=fulfill my obligations
  - 8=do the right thing

- 9=live life to the fullest
- 10=make money
- 11=discover new things about the world
- 12=earn the respect of others
- 13=support my family and friends
- 14=serve my country
- 15=have fun
- 16=be successful
- 17=have a good career

- **Domain of Purpose**

- If the participant has a driving intention, determine which domain it falls into. The domains are the broad areas of life in which the goal or activity resides.
- **Code:**
  - 1=family (immediate or extended family, family of origin or future family, individual family members, etc.)
  - 2=academic achievement (doing well in school, getting good grades, etc.)
  - 3=values, beliefs, faith (spirituality, religiosity, guiding belief(s), etc.)
  - 4=career (work, job, future career or present job, etc.)
  - 5=country (USA or other countries)
  - 6=sports
  - 7=arts (theater, ceramics, painting, singing, playing and instrument, etc.)
  - 8=service (community service, helping others, helping community, etc.)
  - 9=political/social issues (women's rights, gay rights, anti-war interests, etc.)
  - 10=other hobbies or leisure activities (gaming, gardening, etc.)

- **Orientation**

- If the participant has a driving intention, determine whether the participant's driving intention is directed towards benefitting himself, others, or both.
- Keep in mind:
  - The reasons the participant gives for pursuing his goal or for his activities.
- **Code:**

- 1=no intentions
- 2=self-oriented intentions
- 3=other-oriented intentions
- 4=both self- and other-oriented intentions

- **Action**

- If the participant has a driving intention, determine whether he is engaged in activity related to that intention.
- Identify any past, present, or future actions ie. any physical, social, or mental doings related to the driving intention.
- **Code:**
  - 1=no intentions
  - 2=no activities related to driving intentions
  - 3=one or more activities related to driving intentions