



## Life Experience and Mode of Coping: Relation to Moral Judgment in Adulthood

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Two studies examining Gibbs's (1977, 1979) hypothesis on the relation between mode of coping with human needs and moral development in adulthood are presented. It was hypothesized that mature levels of moral reasoning would be related to affirmative coping, whereas conventional reasoning would be related to abortive coping. In Study 1, 70 adults ( $M = 44.3$  years of age) were given the Defining Issues Test (DIT) and classified as either principled or conventional moral reasoners. From this original sample, 13 principled and 15 conventional women were administered an Existential Coping Interview (ECI), designed to assess affirmative and abortive coping with human needs (after Fromm, 1955) arising from an experience of loss. Results indicated that conventional moral reasoners dealt abortively with Fromm's existential needs, whereas principled reasoners exhibited affirmative coping strategies. In Study 2, 75 adults 20 to 78 years of age were administered the ECI; measures of moral reasoning (DIT), openness to experience, and coping; and an impact of life events scale. A positive relationship was demonstrated between existential coping and principled reasoning, openness to experience, and problem-focused coping strategies. Discussion focuses on the cognitive definition of life experience and situational and contextual variability influencing moral development in adulthood.

The role of life experience in the development of adult moral reasoning has served as the focal point for this investigation. Flavell (1970) has suggested that life experience is the major source of adult cognitive changes in judgments, attitudes, and beliefs. The belief that the adult years define an important and lively period for moral change has emerged as a theme in many recent works in moral development (Gibbs, 1979; Kohlberg, 1973; Murphy & Gilligan, 1980). There has been a paucity of research investigating moral reasoning in adulthood in general, and there have been almost no attempts to relate that

development to the specifics of adult life experience.

### Investigating Life Experience in Adulthood

The study of life experience in adulthood has almost exclusively relied on the rating scale or objective questionnaire as the primary research technique. Holmes and Rahe's (1967) Social Readjustment Scale (SRRS) is perhaps the best known tool in this category. Although the past decade has seen attempts to modify and improve upon Holmes and Rahe's method (Guttman, 1978; Hurst, Jenkins, & Rose, 1978), all have involved either an objective rating scale or a normative weighting procedure. Objective approaches result in the equal treatment of relatively minor life matters and major life events (Guttman, 1978; Wilson, 1975) and in giving too little regard for the full social and personal context of the life event (Brown, 1974). Normative weights have not been found to be an equivalent substitution for the assessment of the self-rated impact of events on individuals (Hurst et al., 1978).

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The need for assessing life experiences by a more respondent-oriented, subjective approach is clear (Neugarten, 1977). Rizzo and Vinacke (1975) emphasize that in employing a more subjective open-ended life experience questionnaire, in-depth face-to-face interviews should be used.

#### Adult Moral Development

Kohlberg (1973) contends that moral stage development in adulthood presupposes experiences of metaethical reflection, personal choice, and commitment, whereas childhood moral development is more concerned with general cognitive process of social role-taking opportunities. Bielby and Papalia (1975) also point to self-involving subjective life experiences as the stimuli for advances in moral development in adulthood.

Gibbs' (1977, 1979) recent speculations regarding moral judgment development in adulthood provides both a descriptive account of the nature and development of mature moral thinking as well as an outline for a structural framework from which to evaluate subjective reports of life experience in adulthood. He has proposed a two-phase model of moral development, restricting moral development in the cognitive-structural sense to childhood and adolescence. Development of moral reasoning beyond conventional levels in adulthood belongs to a separate existential phase, which although based on the second-order thinking characterizing formal operational and principled levels of cognitive and moral development, applies this perspective-taking to questions of consciousness, ethics, and consideration of the human condition.

Gibbs' theory has a strong base in the existential writings of Erich Fromm. For human beings, the natural equilibrium between the organism and ecology becomes disturbed when the limitations of existence are realized (e.g., the inevitability of death). Awareness of such limitations generates existential human needs. Fromm (1955) has identified five existential human needs. Relatedness is the need to overcome feelings of aloneness and isolation. Transcendence represents the need to surpass passivity and demonstrate effectiveness. Rootedness involves the need for warmth, protection, security, and stability.

Identity is man's need to control his own fate and be aware of himself as a separate entity. Finally, the need for Meaning entails having a guiding set of beliefs and a goal to which one can attach meaning in life.

When a need is generated, a method of coping with it is sought. According to Fromm, these solutions can represent either abortive or affirmative attempts at coping. Affirmative modes of dealing with the respective needs produce mutual love, productive creativity, egalitarian community, responsive individuality, and a system of reason and devotion. If the affirmative modes for dealing with needs are blocked, some solution must still present itself. Negative, nonproductive coping mechanisms can thus emerge. These abortive modes of dealing with the respective needs generate obsessions with power or submission, wanton destructiveness, in-group chauvinism, herd conformity, and rationalizing ideology (Fromm, 1955; Gibbs, 1979).

As a way of further clarifying Fromm's existential needs we can share the statements read to subjects as a part of our assessment of their coping with these needs following an intense experience of loss.

*Relatedness:* "After an experience such as this, it is common to feel alone, isolated, and in need of people. Did you find yourself dealing with feeling such as these?"

*Transcendence:* "After an experience like yours, many people feel that the world is hostile and indifferent. As a result, you might have felt fearful, uncertain, alone, or lost. In the face of this it is common to want to demonstrate your existence—to show that you matter, that you are effective. We would like to know if you found yourself dealing with feelings such as these and how you dealt with them."

*Rootedness:* "After an experience like yours, it is very natural to feel torn away and to desire some kind of warmth and security, stability, protection, and help. Did you find yourself dealing with feelings such as these?"

*Identity:* "It was always important for people to feel that they can control their own fate, to feel like their life is truly their own, and to make decisions as a separate being. After an experience like yours it becomes very important to regain these feelings of self. We would like to know if you found yourself dealing with feelings such as these, and how you dealt with them."

*Meaning:* "People need to make sense out of their lives and to have a set of beliefs to guide them. Along with this, people often need goals to which they can attach meaning in life. When feelings of loss like yours are experienced, these things might seem to become confusing and disoriented. Life may appear to be very meaningless."



Sometimes it is important to reevaluate what is important to you. Did you find yourself dealing with feeling such as these?"

Life events offer the situational conflicts conducive to reflection and reordering of priorities and thus can be seen as a vehicle for promoting awareness and coming to terms with existential human needs. Furthermore, realization of the human situation and the acknowledgment of and coping with existential needs emerge with the achievement of "objectivity" in human development (Fromm, 1955), an objectivity reminiscent of cognitive-structural accounts of mature cognitive and moral thought.

The transition to adult forms of moral reasoning appears to be in part the capacity for commitment and responsibility with respect to the "real experiences" imposed by the "real world" (Labouvie-Vief, 1980, p. 153). As Gibbs suggests, the quest for understanding our own personal existence is triggered by emergent awareness of the unique conditions, situations, experiences, and individual needs that are encountered in the postadolescent years (Rybash, 1982). Such a view is indeed consistent with cognitive-developmental accounts of life experience and cognitive-moral changes in adulthood (Bielby & Papalia, 1975; Flavell, 1970; Kohlberg, 1973).

### Study 1

The intention in this exploratory study was to examine Gibbs' hypotheses on the relationship between moral development and differential strategies for coping with human needs. Coming to terms with human existential needs is in part the result of encountering significant life experiences. It seemed feasible to study affirmative versus abortive coping strategies through the in-depth examination of a single life event—personal loss, an intense and significant experience conducive to the awareness of needs. Second, it is a relatively universal phenomena, yet permits flexibility in individual interpretation. Finally, Hultsch and Deutsch (1980) suggest that certain life events are sensitive to chronological age, sequencing and social norms; loss, however, is not an age-normative event and is not dependent on these factors.

The life events literature calls for a more sensitive means of exploring individual life experiences, allowing for biographical information and subjective interpretation. To this end a semi-structured interview was developed to evaluate the experience of loss and mode of coping with the five existential needs arising from this experience. It was hypothesized that respondents who dealt with their experience of loss affirmatively would be in the principled-existential phase of moral reasoning, whereas adults who coped with loss abortively would be in the conventional-standard phase.

### Method

**Subjects.** From an original sample of 70 ( $M = 44.3$  years of age) administered the Defining Issues Test (DIT) of moral reasoning (Rest, 1979), 13 principled and 15 conventional reasoners were interviewed. All of the interviews were conducted with women. A  $P$  value reflecting the degree of importance that each subject attributes to principled moral considerations in resolving the DIT dilemmas, and a "Kohlbergian stage" score representing the level of reasoning employed to an exceptional extent were used to define principled and conventional-level subjects. Individuals were classified as principled-existential phase reasoners if they had  $P$  scores of 30 or higher (out of a possible 60), and could be stage typed at level 5A or higher. Our final sample represented the total number of women from the original sample classified as principled reasoners and 15 subjects randomly selected from the pool of conventional reasoners.

**Instrument and procedure.** A semistructured interview based on the literature of Fromm (1947, 1955) was constructed to assess mode of dealing with loss (Existential Coping Interview; ECI). The interview consisted of 35 questions developed to uncover use of affirmative and abortive coping strategies pertaining to needs arising from a personal experience of loss. The questions were based on affirmative and abortive characteristics described by Fromm. Each subject was individually interviewed, and responses were tape recorded and then transcribed verbatim.

A 4-point Likert-type scoring system was employed (4 = strongly affirmative to 1 = strongly abortive). Each subject's weighted responses were summed over the entire interview, as well as across each need. The development of the ECI, scoring procedures, and interview are presented in Kaus, Lonky, Roodin, and Reihman (1982). Table 1 presents a representative subset of questions for each of the needs with their corresponding scoring dimensions.

One half of the protocols were randomly selected and scored by an independent rater familiar with the scoring procedures. Raters were blind to subjects' classification as conventional-standard or principled-existential phase reasoners. The estimates of interrater reliability for each need and the overall interview are as follows: Relatedness = .92, Transcendence = .84, Rootedness = .83, Identity = .88, Meaning = .92, and overall = .89.



Table 1

Sample Questions and Scoring Dimensions From the Existential Coping Interview

Need	Strongly affirmative 4	More affirmative than abortive 3	More abortive than affirmative 2	Strongly abortive 1
<b>Relatedness</b>				
Did you find yourself seeking out others or joining groups?	Appropriate seeking out of others	3	2	Over-reliance on others
Did you find yourself dealing with a lack of trust in others?	Trusting of others (with appropriate sense of caution)	3	2	No trust in other people (scared)
<b>Transcendence</b>				
In dealing with these feelings of loss did you keep them to yourself or did you seek and reach out to help others?	A desire to help others	3	2	Inappropriate withdrawal
Did you find yourself taking up some activity or hobby?	Took up creativity activity	3	2	Engaged in destructive activity
<b>Rootedness</b>				
Did you find yourself less willing to share with others (with those who were close to you)?	Willing to share with those close to you	3	2	Not willing to share (selfish)
Did you feel that you had alternate sources of warmth and security after your loss?	Awareness of other sources of warmth and security	3	2	Warmth and security restricted by loss—no alternate sources
<b>Identity</b>				
How was your sense of "self" affected by your experience of loss?	Deeper more personal sense of identity	3	2	Identification with some "other defined" role
Did you feel it was important to do what you wanted to do even if it meant being different and standing out from others?	Take the actions (productive) that you want to even if they are quite different from others	3	2	Halted own behavior or rationalize thoughts so as not to be different
<b>Meaning</b>				
Was there an underlying structure for your beliefs, or did you find yourself believing in things just to believe in something?	Beliefs correspond to sturdy value system	3	2	Believes in things just to believe
Were you able to maintain your beliefs and goals despite this experience of loss?	Maintains a value system and goals; or an increased awareness of values and goals as a result of the experience	3	2	Belief system and/or goals drastically weakened or destroyed; no sense of reevaluating meaning in life or an irrational desire to maintain previous nonproductive goals and beliefs



### Results

Conventional reasoners (mean P score = 18.87) in our interview sample averaged 42.5 years of age and had completed an average of 13.6 years of education. Our principled reasoner group (mean P score = 37.23) averaged 34.9 years of age and had completed an average 16 years of education.

Total scores for each need were analyzed with a principal components analysis with a varimax rotation. Notwithstanding the small sample size, the preliminary nature of Study 1 required an initial reading of the structure among needs scores. Two factors with eigenvalues greater than 1.00 were extracted, accounting for 80.6% of the total variance. With the exception of Transcendence, all of the needs exhibited strong Factor 1 loadings. Factor 1 alone accounted for 56% of the total variance.

Overall coping scores for principled-existential phase reasoners ( $M = 3.49$ ,  $SD .45$ ) were significantly higher than for the conventional-standard phase reasoners ( $M = 3.03$ ,  $SD .37$ ),  $t(22) = 2.89$ ,  $p < .01$ . The direction of the difference shows support for the hypothesis in that principled-existential reasoners evidenced more affirmative coping with needs arising from loss.

An analysis of our interviews indicated that all subjects were responding to one of two types of loss experience; death or dissolution of a relationship. There was no difference in coping score between subjects belonging to either of these groups, suggesting that the subjective interpretation of loss is the important factor rather than the specific kind of loss. Due to the open-ended nature of the interview, we discovered subjects were responding to losses experienced at various times in their lives. There was no difference between conventional and principled reasoners in average time since loss, nor was there a significant relationship between coping at time of loss ( $r = .13$ ). Finally, there was no significant relationship between coping and level of education.

### Discussion

Study 1 provided preliminary support for Gibbs's hypothesis. Using loss as the significant life event, it was found that subjects in

the principled-existential phase of moral development do, in fact, deal with human needs more affirmatively than do those in the conventional standard phase.

In the interview sample, education was positively related to P score. This is consistent with past studies that have found educationally advanced groups attributing more importance to principled moral considerations (Martin, Shafto, & Van Deirse, 1977; White, 1977).

The preliminary principal components analyses indicated that with the exception of Transcendence, the four needs appear homogeneous and are related to one general factor. The internal consistency of this cluster suggests the utility of the instrument for assessing coping with a common need.

The underlying attribute in the interviews, in relation to loss, appears to be the need for a significant other to relate to. Differences occurred in the way people dealt with this need. Although the experience is clearly stressful, affirmative copers exhibited an objective, rational orientation to their predicament and maintained an understanding and respect for the reality of their situations. Abortive subjects, however, displayed either overdependence or inappropriate withdrawal, often accompanied by feelings of blame and revenge. From these findings, it appears that the stress of loss, per se, is not as important as the mode of coping with it. Stressful events, if dealt with affirmatively, may very well promote mature growth.

### Study 2

The goal of this study was to elaborate more fully the nature of the affirmative coping-life experience-moral judgment relationship. In so doing we more closely examined the validity of the ECI and its relationship to measures of problems and emotion-focused coping (Folkman & Lazarus, 1980), openness to experience (Costa & McCrae, 1978), and moral judgment (Rest's Defining Issues Test, Rest, 1979). We continue to study affirmative versus abortive coping strategies through the examination of a single experience of loss.

Openness to experience has been characterized (Costa & McCrae, 1978) as a dimension of adult personality reflecting the degree of toleration for and "exploration of" novel

experience. Those described as open to experience tend to seek out and resolve challenging experiences, express a broader range of interests, and seem to be active participants in and creators of their world. Adults who are more open to experience exhibit more advanced levels of ego development (McCrae & Costa, 1980) and are characterized as internal on measures of locus of control (Coan, Fairchild, & Dobyns, 1973). Rybash (1982) found a strong positive association ( $r = .59$ ) between openness to experience and moral judgment. These findings suggest that the traits of the affirmative copers are quite similar to both the theoretical and empirical definitions of the openness construct.

The use of the Ways of Coping Checklist (Folkman & Lazarus, 1980) provided an opportunity to examine the relationship between the existential coping of the ECI and problem and emotion-focused coping. Kaus et al. (1982) report more use of problem-solving coping among principled moral reasoners. A similar trend emerged among affirmative copers.

Finally, the Impact of Event Scale (Horowitz & Wilner, 1980) was administered to provide information regarding subjective reaction to the event of loss.

### Method

**Subjects.** The subjects were 75 adults, 12 men and 13 women in two age groups, 20 to 34 years (mean chronological age = 24.3; mean years of education = 14.60), and 55 to 78 years (mean CA = 65.7; mean years of education = 10.04), and 13 women and 12 men in the age group 35 to 54 years (mean CA = 41.8; mean years of education = 13.21). Subject/volunteers were middle class, Caucasian, predominantly Protestant or Catholic, and were all healthy, community dwelling residents.

**Procedure and measures.** In an individual testing session subjects were administered a revised brief version of the Existential Coping Interview (ECI) and Rest's (1979) Defining-Issues Test (DIT). Subjects were asked to return by mail a packet of questionnaires that included the Experience Inventory, the Ways of Coping Checklist, and the Impact of Event Scale. Response rates for the mailing were 93%, 83%, and 100% for the 20 to 34-, 35 to 54-, and 55 to 78-year-old groups, respectively.

**Scoring and normative description.** For the DIT, a P% value reflecting the degree of importance attributed to principled moral considerations in resolving Kohlbergian moral dilemmas was obtained for each subject. P% scores on the DIT range from 0% to 95%. Mean P% scores for the young, middle-aged, and oldest groups were 35.92 ( $SD = 9.47$ ), 36.84 ( $SD = 10.80$ ), and 31.72 ( $SD = 10.80$ ), respectively.

A 5-point Likert scoring system (5 = strongly affirmative to 1 = strongly abortive) was employed for each item on the ECI. Scoring of individual items on the ECI was performed during the interview. Each interviewer is then blind to the possible influence of performance on the other objective measures. Twenty-five of the interviews were tape recorded and transcribed to permit scoring by an independent rater familiar with the scoring procedures. Raters were blind to subject's performance on the objective measures. The estimate of interrater reliability was .78 across all items. Scores on the ECI range from 18 to 90. Mean ECI scores for the young, middle-aged, and oldest groups were 59.76 ( $SD = 11.20$ ), 62.04 ( $SD = 11.80$ ), and 54.80 ( $SD = 10.90$ ).

Following the McCrae and Costa (1980) report that subject responses to items on all of the dimensions of the Experience Inventory reflect a single dominant factor (i.e., openness to experience), openness to experience scores were derived by combining the subscales of the Experience Inventory. Subjects were asked to rate 48 items on a 5-point Likert scale (strongly agree to strongly disagree), with scores ranging from 48 to 240. Costa and McCrae (1978) report internal consistency as measured by Cronbach's alpha to be .80 for the full scale score, with a 6-month test-retest reliability of .86. Mean openness to experience scores for the young, middle-aged, and oldest groups were 147.68 ( $SD = 13.80$ ), 153.08 ( $SD = 17.30$ ), and 149.76 ( $SD = 18.40$ ).

Problem-focused (range 0–24) and emotion-focused (range 0–40) subscale scores were derived from the Ways of Coping Checklist. Subjects were asked to indicate whether they employed certain coping strategies during a recent stressful life event. Instructions to subjects were modified so that each individual responded on the Ways of Coping Checklist to the particular event of loss described on the ECI. Aldwin, Folkman, Schaefer, Coyne, and Lazarus (1980) report a mean Cronbach's alpha of internal consistency of .84 across all items. Mean scores for problem and emotion-focused coping for the young, middle-aged, and oldest groups were, respectively,  $M_{PF} = 14.20$  ( $SD = 2.90$ ),  $M_{EF} = 19.72$  ( $SD = 4.40$ );  $M_{PF} = 11.64$  ( $SD = 2.90$ ),  $M_{EF} = 19.80$  ( $SD = 4.80$ ); and  $M_{PF} = 11.44$  ( $SD = 3.69$ ),  $M_{EF} = 18.68$  ( $SD = 3.12$ ).

Similarly, subjects were asked to respond to the Impact of Event Scale with reference to their particular experience of loss. The Impact of Event Scale asks individuals to consider how frequently statements presented on the scale were true for them with respect to that event of loss. Subjects were asked to check the appropriate column—not at all, rarely, sometimes, or often. Scores on the impact of Event Scale were totaled across all items and ranged from 16 to 64. Horowitz and Wilner (1980) report a test-retest reliability of .87 for their scale. Mean Impact of Event scores for young, middle-aged, and oldest groups were 36.68 ( $SD = 3.75$ ), 37.88 ( $SD = 4.35$ ), and 40.16 ( $SD = 2.84$ ).

### Results

Analysis for sex differences on P% and ECI Scores  $\times$  Age indicated no differences. Employing a median split on ECI scores ( $Mdn = 60$ ), high (affirmative) and low (abortive) copers' Impact of Event scores were compared.

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Table 2  
Pearson r Intercorrelation Matrix.

Variable	Age	Years of education	P%	PF	EF	OE
Years of education	-.50***	1.00				
P%	-.24°	.50***	1.00			
Problem-focused coping (PF)	-.29°	.43***	.59***	1.00		
Emotion-focused coping (EF)	-.10	.22	.12	.25°	1.00	
Openness to experience (OE)	-.02	.41**	.58***	.35**	.25°	1.00
Existential Coping Interview	-.23°	.48***	.69***	.41**	.20	.42**

\* Degree of importance attached to principal moral considerations.

°  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$ .

No significant difference was found ( $M_{high}$  copers = 39.19,  $SD$  3.14;  $M_{low}$  copers = 37.32,  $SD$  3.96).

*The Existential Coping Interview.* Based on our experience in Study 1, a shortened 25-question interview was employed in this study to assess the five existential needs and mode of coping.

Subjects' scores for each item were analyzed with a principal components analysis with varimax rotation. Two factors with eigenvalues greater than 1 were extracted. Seven items exhibiting complex factor structures were eliminated, and the resulting 18 items were then submitted to a principal axis method of factoring using a varimax rotation. Results revealed only 1 factor with an eigenvalue greater than 1. The internal consistency (alpha) of our scale was estimated to be .81. Factor loadings ranged from .52 to .85 for the individual items.

*Age/years of education/dependent measure relations.* Table 2 presents Pearson product-moment correlations for age, years of education, and measurement variables. Of note is that, with the exception of emotion-focused coping, P% and ECI are significantly related to all other variables in the matrix. Table 3 presents P% relations with ECI, problem-focused coping, and openness to experience when controls were applied first separately and then jointly for age and years of education. Results indicate that the strong positive association between moral judgment and the coping and individual difference variables are not significantly reduced by controlling for age or years of education.

To examine more closely the influence of demographic and individual difference and coping measures on moral judgment, variables of sex, age, years of education, and ECI, problem-focused coping, emotion-focused coping, openness to experience, and impact of events were entered into a stepwise regression procedure to determine their relative influence on P% score. The results showed ECI entering the equation in Step 1, account for 48% of the variance,  $F(1, 73) = 69.01$   $p < .001$ . Problem-focused coping entered in Step 2,  $F(1, 72) = 20.76$   $p < .001$ , accounting for 11% of the variance, and openness to experience in Step 3,  $F(1, 71) = 12.82$   $p < .001$ , accounting for an additional 6% of the variance in the system. The final significant step, years of education  $F(1, 70) = 4.05$   $p < .05$ .

Table 3  
Relationships Between Moral Judgment and Problem-Focused Coping, Existential Coping, and Openness to Experience With Controls for Age and Years of Education

	P%	ECI	Problem-focused coping	Openness to experience
Controlling for age		.66	.56	.58
Controlling for years of education		.56	.46	.45
Age and years of education		.56	.47	.45

Note. All partial correlations  $p \leq .001$ . ECI = Existential Coping Interview, P = degree of importance attached to principled moral considerations.





.05, accounted for only 1% additional variation in P% score. Sex, age, emotion-focused coping, and impact of events were not helpful in explaining P% score variation.

#### Discussion

As did the exploratory investigation, this study demonstrated support for Gibbs' hypothesized relationship between moral judgment development and objective coping with human needs.

The factor analysis of the ECI has produced what we feel is a valid scale assessing affirmative and abortive coping with human needs. Our resulting 18-question interview reflects items that are homogeneous and related to one general existential need factor. The internal consistency of the scale suggests the utility of the interview for assessing coping with this common need.

A strong positive relationship was demonstrated between existential coping and moral judgment. This relationship remained after controlling for both age and years of education. ECI alone explained 48% of the variance in P% score in the multiple regression analysis. Affirmative and abortive coping with human needs in response to a critical event of loss does appear to be a life experience measure that can significantly predict moral reasoning in adulthood.

Examining the relationship between ECI and other measures of individual differences, life experience, and coping further clarifies both ECI-moral judgment relations; as well as variables potentially influential and predictive of adult moral judgment.

No differences were demonstrated on impact of event scores for those who scored high or low on ECI. This is to say that affirmative and abortive copers seem to be responding similarly to their experience of loss.

As we suggested earlier, the dimension of openness to experience as measured by the Experience Inventory appears related to coping with human needs as measured by the ECI. The characteristics of those who appear "open to experience" appear to be quite similar to those of the affirmative copers as described by Fromm. Results indicate a strong positive relationship between ECI and openness to experience scores. Openness to experience,

P% relations are quite consistent with the findings of Rybash (1982).

There appears to be a positive relationship between ECI and problem-focused coping as measured by the Ways of Coping Checklist. Problem-focused coping also accounted for 11% of the variation in P% score. It is interesting that this significant relationship did not hold between ECI, P%, and emotion-focused coping. Perhaps the cognitive competence emphasis of problem-focused coping resources accounts for this finding. Similar results were found in an analysis of the relationship between mode of coping, moral reasoning, and coping resources (Kaus et al., 1982).

The relationships between age and years of education and P% score are in close accord with those reported by Rest (1979). Controlling for years of education did not significantly reduce the associations between ECI, problem-focused coping, openness to experience, and P% score.

#### Conclusions

The results support the hypotheses on the relationship between affirmative and abortive coping with human needs and moral reasoning in adulthood. Higher levels of moral reasoning in young, middle-aged, and older adults are consistently found among affirmative copers. In this respect support has been provided for Gibbs' theorization regarding mature moral thinking and awareness and coming to terms with existential human needs. This cognitive appraisal, and the emphasis on cognitive coping resources (e.g., problem-focused coping) suggests that we might speak of the cognitive definition of life experience as providing some understanding of the situational and contextual variability influencing moral development in adulthood. It does appear that the Existential Coping Interview is able to tap into that definition process.

The shortened version of the ECI has provided a measure that balances the need for a respondent-oriented subjective approach to life experience, with the validity and reliability expected of assessment instruments.

With the identification of a number of variables influential in adult moral development (e.g. formal operations, openness to





experience, and coping), and the presence of a number of theoretical statements regarding adult moral change (e.g., Gibbs, 1979; Kohlberg, 1973; Murphy & Gilligan, 1980), it appears that a more systematic attempt at drawing conclusions about causal relationships is called for. The application of structural causal models appears applicable here to evaluate the fit between moral judgment data and hypothesized causal networks of life experience and cognitive variables.

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