

The Relation of Recalled Life Events, Childhood Relationships with Parents and Meaning in Life

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ZUSAMMENFASSUNG. Das zentrale Anliegen der vorliegenden Arbeit ist es, die Bedeutung kritischer Lebensereignisse und die Bedeutung der erinnerten Erziehung für die aktuelle Wahrnehmung von Sinn im Leben zu untersuchen. Insgesamt konnten 231 der befragten Personen im Alter zwischen 18 und 64 Jahren in die Analyse einbezogen werden. Methodisch wurde dafür eine Fragebogenbatterie erstellt, die es ermöglichte die aktuelle Sinnerfüllung (Purpose in Life Test von Crumbaugh & Maholick, 1964), die retrospektiv erinnerte Erziehung (Fragebogen zum erinnerten elterlichen Erziehungsverhalten von Schumacher, Eismann & Brähler, 1999), die kritischen Lebensereignisse der gesamten Biographie (Leipziger Ereignis- und Belastungsinventar von Richter & Guthke, 1995), das dispositionelle Bewältigungsverhalten (Brief COPE von Carver, 1997), sowie einige demographische Variablen zu erheben. Sowohl die Ergebnisse zu den demographischen Variablen als auch die Analysen der einzelnen kritischen Lebensereignisse zeigten signifikante Unterschiede in der Ausprägung des aktuellen Lebenssinns. Auch die durchschnittliche Erwünschtheit kritischer Lebensereignisse steht in einem positiven Zusammenhang mit der aktuellen Wahrnehmung von Sinn im Leben. Weiters zeigten allgemeine lineare Modelle, dass die Qualität der erinnerten Erziehung einen moderierenden Effekt auf diesen Zusammenhang ausübt. Für die Interpretation der Ergebnisse zu den demographischen Variablen, den kritischen Lebensereignissen und der Erziehung wurden die Sinntheorie von Frankl und andere vorangegangene Studien herangezogen. Die Daten zum Bewältigungsverhalten wurden im Rahmen der Theorie der hierarchischen Kontrolle des Handelns gedeutet. Auf der höchsten Ebene dieser Hierarchie wird der Sinn des Lebens konstruiert.

Schlüsselwörter: Bewältigung, Erziehung, Lebenssinn, kritische Lebensereignisse

ABSTRACT. The main purpose of this study is to investigate the significance of critical life events and childhood relations with parents for the present perception of meaning in life. A number of 231 volunteers of different ages and professions were questioned. They had to complete the Purpose in Life Test (PIL) by Crumbaugh and Maholick (1964), the Questionnaire of recalled parental rearing behaviour (QRBRB) by Schumacher, Eismann and Brähler (1999), a list of life events newly developed from the "Leipziger Ereignis- und Belastungsinventar (LEBI)" by Richter and Guthke (1995) and the Brief COPE by Carver (1997). Additionally they had to answer demographic questions about themselves. In the present study, specific demographic variables point to significant differences in the level of subjective meaning in life. According to the life events, significant correlations between the favourability of life events and the score of subjective meaning in life were found. There were also significant differences in the level of subjective meaning of life between those who had and those who had not experienced a certain life event. A general linear model demonstrated that the quality of recalled parental rearing behaviour moderates the relation of composite favourability of events to the subjective meaningfulness of life. The results of the demographic variables, life events and the perceived parental rearing behaviour were interpreted in the context of Frankl's theory of meaning and other previous surveys. The data of coping is interpreted in the context of the hierarchical control theory of acting. On the highest level of this hierarchy the meaning of life is designed.

Keywords: meaning of life, life events, coping, parental rearing behaviour

Introduction

Meaning in life is a topic of nearly everybody's interest. In spite of this, meaning in life has tended to be ignored in psychological empirical work, perhaps because of the difficulty in conceptualization, and also because questions relating to the meaning of life are regarded as more philosophical than psychological. However, a new streaming within the science of psychology, called *positive Psychology*, nowadays address variables like the meaning of life. Especially the Anglo-Saxons make a lot of research in spiritual topics (Bucher, 2009).

The general, existential and explicit concept of life purpose cannot be answered with the methods of logic and empiricism. What people believe about meaning will differ according to their beliefs and values and requires a decision (Schmitz, 2005). But psychologists can work with the purpose of life on the personal level. Based on the model of action and the humanistic oriented idea of man, in which human beings are understood to be inventive and reflexive, different questions can be answered, like: What are the sources of individual life meaning? What are the conditions under which an individual will experience her or his life as meaningful? How does the meaning of life change over the lifespan and what is the impact of life events to the subjective meaning of life?

In recent years, the construct of the meaning of life or life purpose has received renewed attention and legitimacy, in conjunction with a growing focus on positive traits and psychological strengths. Without exception, meaning in life is regarded as a positive variable – an indicator of well-being, a facilitator of adaptive coping (Chamberlain & Zika, 1988; Kennedy, Kanthamani & Palmer, 1994; Park & Folkman, 1997; Wong, 1998).

The most well-known and extensive exploration of this topic was made by Viktor E. Frankl (1905 – 1997) and thus belongs to the branch of existential psychology. He considered the struggle for an ultimate meaning of life as fundamental and as a dominant drive for human experience (Frankl, 1982, 1985, 1987, 2005). Frankl's approach was developed due to unusual and extremely difficult experiences in his own life. He was prisoner in a number of German concentration camps, where he was confronted with the question of the meaning in life in the most brutal ways. Frankl observed himself and others and found that if people lose all sense of meaning, all is lost (Auhagen, 2000). Those comrades who happened to be left alive by their persecutors, died if they became convinced that their existence was meaningless. Frankl's life and work became guided by the conviction that human beings have a "Will to Meaning" and that they need meaning in life as a foundation of human existence (2005). Suffering from the feeling of meaninglessness, that is, existential frustration, could lead to a form of illness that Frankl (1987) called "Noogenic Neuroses", which involves a kind of existential vacuum.

Frankl (1985) saw a kind of universal meaning in our lives and at the same time, a very individual meaning in each life situation. We have an inner freedom of choice, even in situations characterized by oppression and a lack of freedom, as was the case in the concentration camps. According to Frankl the meaning of life has to be discovered in each of life's situations. He described three "primary ways" individuals find and maintain meaning (Frankl, 1982, p. 39): First, individuals can find meaning while engaging in work or school or other daily activities, as well as standing up for their own opinions. Second, individuals may also find meaning by experiencing or encountering something or someone, like enjoying music or landscapes or relationships of love. The third approach for finding meaning addresses how individuals cope with suffering. Facing difficulties or even traumatic life events can make it impossible to experience or construct meaning. The only thing one can do is to maintain or search for the attitude to one's life. Individuals could overcome those situations mentally. According to Frankl (1987), this value of attitudes, also described as the "Meaning of Suffering", is the superior dimension of meaning, because it deeply expresses how people see their life. It points to a conceptualization of coping with crises, where the active construction of meaning plays a central role. Furthermore Frankl (1987) stated that the self-transcendent aspect and not the direct focusing on pleasure and happiness is what leads to fulfillment. Self-transcendence implies discovering meaning by moving beyond concern for the self and focusing on other people and social and spiritual values (O'Conner & Chamberlain, 1996).

Like Frankl, several other writers and researchers agree that meaning of life is a multidimensional construct and particularly significant for the mental health (Antonovsky, 1984; Benesch, 1990; Chamberlain & Zika, 1988; Grom & Schmidt, 1975; Janoff-Bulman & Wortman, 1977; Schmitz, 2000; Wirtz & Zöberli, 1995; Wong, 1998). The sources of meaning in life vary as widely as individuals themselves. Furthermore these sources may change in importance through time (Brandstädter, 2003; Dittman-Kohli & Westerhof, 2005). A qualitative examination of Ebersole (1998) shows that the participants, not depending on age, named social relationships, like family, partner- or friendship and children, as by far the most important source of meaning in their lives.

The sources of meaning or activities and experiences that give rise to it must be differentiated from the meaning of life, as a set of beliefs about the world and self. According to the personal self-theories most authors postulate a basic conceptual system about the self and the world that developed over time (Catlin & Epstein, 1992, Janoff-Bulman & Schwartzberg, 1991). These basic beliefs or assumptions provide us with expectations about the world and ourselves and with a sense of order and predictability.

They serve as guides for our behaviour and are generally unquestioned and unchallenged (Janoff-Bulman & Schwartzberg, 1991). Silver & Wortman (1989) suggest that expectations provide a sense of coherence and meaning and the system of beliefs and assumptions, may explain the great variability in how people adjust to personal tragedies. Some individuals adjust quickly and others never adjust.

Over a decade of research has indicated that negative life events can cause individuals to question previous beliefs about a just, purposeful world and an invulnerable self (Janoff-Bulman & Schwartzberg, 1991). For example, cancer patients may struggle with questions about the meaning in life without finding satisfying answers, which results in a crisis of meaning. But also positive changes are not uncommon (Park & Folkman, 1997). People who for example have come to terms with great loss or trauma, are often described as being sadder but wiser, suggesting that their positive beliefs about the world have been tempered (Meier, 1992; Park & Folkman, 1997). The developmental psychology assumes that there are antecedent conditions, which lead to a personal disposition of coping and beliefs and exert influence on situational appraisals of certain life events (Fillip, 1995).

When focusing on the outcome, Catlin and Epstein (1992) have argued that basic beliefs like the meaning of life are derived primarily from emotionally significant experiences. They assumed particularly two kinds of experiences to have enduring effects on people's fundamental beliefs. First there are the repeated daily experiences of everyday life, which, although of little significance individually, exert an important cumulative effect. Of particular significance among such events are those based on a child's relationship with his or her parents. A second source of influence on the subjective sense of meaningfulness is the impact of specific, highly significant major life events (Catlin & Epstein, 1992).

The present study was influenced by these two basic assumptions from Catlin and Epstein (1992) and focused on the developmental perspective of the creation of meaning, where antecedent and dispositional variables are supposed to be important for the adjustment of personal life events.

Development of global meaning

There is a general agreement that global meaning is built through an accumulation of life experience (Catlin & Epstein, 1992, Janoff-Bulmann & Schwartzberg, 1991; Park & Folkman, 1987, Taylor, 1983). Park & Folkman (1992) specified this process as follows (p. 119):

A child's view of the self and the world originates in the infant's early experiences, which center on interactions with a caregiver. The child learns trust, benevolence, values, self-worth, and an understanding of person-outcome contingency. Over time the infant's experience becomes integrated into an organizing subjective perspective through memories that integrate the diverse features of lived experience. These earliest mental structures are refined and embellished by experience throughout childhood and adolescence, and changes are much less likely to occur in adulthood.

Empirical studies focusing on the development of some aspects of personal life meaning are rare.

Meaning of life and childhood relationships with parents

The literature on the correlation between child-parent relationships and basic beliefs is primarily theoretical and is generally restricted to self-esteem. Empirical studies of the influence of child-rearing practices on adult personality have produced mixed results. Only the study of Catlin and Epstein (1992) examined the relation of personal meaning in life to childhood relationships with parents. The results showed that the parental rearing behaviours of *acceptance and encouragement* had significant positive influence on the degree of current life meaning.

One of the aims of the present study was to examine the relation of three fundamental dimensions of parental rearing: (a) emotional warmth; (b) control and overprotection; and (c) rejection and punishment.

The personal meaning of life and major life events

Several studies have focused on the development of global beliefs with respect to traumatic events.

The already mentioned study from Catlin and Epstein (1992) also compared people who had and had not experienced particular traumatic events. They found different patterns of basic beliefs. The global beliefs of those who had experienced rejection, sexual abuse, or violent crime were different from the global beliefs of those who had not experienced those traumatic events. For example those who had experienced sexual abuse had significantly less self-esteem, believed themselves less worthy of love and believed the world was less meaningful and benevolent. Positive and negative events also had a cumulative effect on beliefs. Those reporting more positive events and fewer negative events had more positive current beliefs (Catlin & Epstein,

1992). Similarly, Janoff-Bulman (1989, s. Catlin & Epstein, 1992) found that the assumption of meaningfulness of the world differed between victims and non-victims of a number of different traumatic experiences, even after many years.

Other studies determine on specific life events like diagnosis of physical disease or treatment and examined the current coping process and the impact to the personal meaning system. For example Meier (1992) examined cancer patients and found that most had adjusted well. That means that the score of the current personal meaning in life was significant higher than before the diagnosis. The group around Taylor (Bower, Kemeny, Taylor & Fahey 1998; Taylor, 1983; Taylor, Kemeny, Reed, Bower & Gruenewald, 2000) interviewed women with breast cancer and later people who were HIV-positive. Those who had adjusted remarkably well had done so by establishing positive illusions concerning three fundamental attitudes that cancer had challenged: a sense of meaning in life, personal mastery of important events and self-enhancement. Taylor (1983) concluded that a degree of positive distortion of reality is both normal and desirable for optimal functioning. The longitudinal study of Ironson, Stuetzle and Fletcher (2006) is also mentionable in this context. Their study found an increase in spirituality and religiousness after HIV diagnosis, which predicted slower disease progression.

Because of the developmental perspective of meaning in life, the present research aimed to collect data from life events regarding the whole life span. They could be described as positive or negative, traumatic or less significant. The cumulative effect was examined, as well as the impact of specific life events.

Meaning of life and coping

The special class of meaning-based coping processes that support positive affect during chronic stress was focused on Folkman & Moskowitz (2000). They described three coping processes that serve that function: positive reappraisal, problem-focused coping and the orientation to positive events. According to their thesis, appraised meaning is integral to the process of coping itself and means the evaluation of the personal significance of a stressful situation. The manner in which people use meaning as part of coping processes has usually been described in relation to the reconstruction of global meaning, such as existential beliefs or distal goals that define one's identity in the aftermath of trauma (Folkman & Moskowitz 2000, Park & Folkman, 1997). There is interdependence between the appraised situational meaning and the global meaning of life (Grom & Schmidt, 1972; Park & Folkman, 1997; Wirtz & Zöberli, 1995).

Schmitz and Hauke (1999) questioned 323 subjects about their experiences of the meaning of life, about boredom and about their reaction to and the coping with stress. Subjects with a high degree of meaning experience showed a highly significant tendency toward problem-related strategies. Subjects with a low level of meaning experience were inclined to masking their fear. Results of another study (Schmitz, Arnold, Jahn & Müller, 2000) showed that humans maintaining their personal meanings of life are significantly more successful with coping strategies such as planning and mastering of threatening life events, with searching for emotional as well as instrumental support and with re-evaluating the personal meaning and, contrary to stressed people without such meanings, they avoid defence strategies clearly. According to Schmitz and Hauke (1999) the global meaning system is a factor that shapes coping in the process. Also the stress model of Lazarus (1981; 2000) assumed that the appraisal of the situation and the search for meaning is constitutive for the coping process. Most of the researchers within this field conceptualize the search for meaning as intertwined with coping (Emmons, Colby & Kaiser, 1998; Folkman & Moskowitz, 2000; Janoff-Bulman & Schwartzberg, 1991; Sommer & Baumeister, 1998; Thompson, 1991; Mehnert et al., 2007).

Meaning of life and the interaction of life events and relationships with parents

A further point in the present study was the nature of the interaction between significant life events and childhood relationships with parents as they influence personal meaning of life. It is a key assumption in psychoanalysis and other views of psychotherapy that secure relationships in childhood are conducive to high levels of ego strength and life purpose (Frankl, 2005, 1985, 1982; Grom & Schmidt, 1975; Wirtz & Zöberli, 1995). If this hypothesis is correct, favourable relationships with parents should moderate the adverse influence of negative life events on personal sense of meaning in life. The study of Catlin and Epstein (1992) had among other things, examined this hypothesis. Results showed that the interaction of parent acceptance and favourability of major events made a significant contribution to the basic belief regarding meaning in life, but not in the theoretically predicted way. For the high parent-acceptance group, the correlation of favourability of major life events with meaning was positive and highly significant, whereas for the low parent-acceptance group, the correlation was close to zero. Thus, for subjects who reported high parent acceptance, current beliefs in the meaningfulness of life were directly associated with the favourability of the major life events score, whereas for subjects who reported low parent acceptance, the same beliefs were unrelated to the favourability of the major life events score. Whatever life events the subjects with low reported parent acceptance referred to, the score on the meaning-dimension was generally relative low. The explanation for the findings Catlin and Epstein (1992) made is that those

with low parental acceptance had parents who behaved inconsistently with respect to fulfilling their needs. Given that the subjects had a well-established view in early childhood of the world as being capricious, it is understandable that later events might have no consistent effect on their sense of meaning in life. For subjects who reported high parental acceptance, on the other hand, a more orderly response to events appears to be operative. They appear to be more directly responsive to the contingencies in their environment in regard to this particular belief. This suggestion runs counter to the psychoanalytic and therapeutic assumption that positive relationships with parents foster the development of ego strength and life purpose, which is assumed to contribute to the ability to cope with the vicissitudes of life.

Because of this conflicting result, the interaction between the quality of relationships with parents and the occurrence of life events on the favourability of current meaning in life will be analyzed in this study.

Hypothesis

The following hypotheses were tested: (1) Demographic variables, like age, gender, profession, marital status and primary caregiver during the childhood, are differentially associated with the sense of meaning in life. (2) The experience of different life events is differentially associated with the personal meaning in life. (3) Multiple life events have a cumulative effect on basic beliefs. (4) Reports of favourable childhood relationships with parents are positively associated with favourable sense of meaning in life. (5) Favourable childhood relationships with parents have a moderating effect on the relation of life events and personal meaning of life. (6) There is a difference in the tendency of coping with stressful life events between subjects with high levels of meaningfulness in life and lower levels.

Methodology

Subjects

The subjects were questioned in the period of June to November 2008, in and around the city of Vienna. They were unspecifically recruited via verbal propagation. Out of the 400 distributed questionnaires, 231 made it into the statistic analysis. The sample contained 149 females and 82 males. Their age ranged from 18 to 64, with a mean of 33.55 ($MD = 30$, $SD = 10.77$). Their age ranged from 18 to 64, with a mean of 33.55 ($MD = 30$, $SD = 10.77$). 74.9 % of the participants were unmarried, 15.2 % married, 9.5 % divorced and 0.4 % widowed. More than the half of the sample had been in a steady partnership (67.1 %). 29.4 % of the subjects had one to five children ($M = 1.79$, $SD = 0.96$). Educationally, 2.2 % finished compulsory school, 6.5 % had completed an apprenticeship, 24.7 % had graduated from high school, 26.8 % were students and 39.8 % already graduated from university. Thus, the sample is strongly positioned within the upper educational level. Last but not least most of the participants grew up with their mother and father (79.7 %), 6.1 % only had the first ten years with both of their parents, 9.5 % of the subjects grew up with a single parent and 4.4 % with one sib parent and one step parent.

Instruments

The following materials were combined in one questionnaire and distributed to the participants.

A *short demographical questionnaire* containing questions about age, sex, marital status, love partnership, the existence of own children, primary caregiver, prior education and profession.

The *meaning in life* was assessed by the Purpose in Life Test (PIL), which was developed by Crumbaugh and Maholick (1964) and is based on the psychological concept of Victor E. Frankl (1985, 2005) to measure a person's will to meaning. The PIL consists of 20 items, which are rated on a seven point Likert-type scale. A sample item is: I am usually (1) completely bored (4) neutral (7) exuberant, enthusiastic.

Chamberlain and Zika (1988) investigated the factor structure of this scale and a principal component analysis showed four correlating factors, which together accounted for 49 percent of the variance. A further principal component analyses showed a one-factor solution with a second-order factor, which pointed towards a general meaning in life dimension (Chamberlain & Zika, 1988). For the present study this general dimension of meaning was used. The analysis of reliability showed a Cronbach Alpha of 0.846. The maximal score is 140 and the minimal is 20. The mean of the present sample was 106.86 ($SD = 13.46$), pointing toward a quit good sense of meaning in life.

The *early childhood relationships* were assessed by the Questionnaire of recalled parental rearing behaviour (QRBRB) from Schumacher (2002; Schumacher, Eiseemann & Brähler, 1999). It is conceptually based on the Swedish EMBU instrument, which

is one of the most widely used in various psychopathological conditions. The QRBRB allows assessing memories of perceived parental rearing behaviour, for the father and the mother separately. It comprises factor-analytically derived dimensions of (a) emotional warmth (b) control and overprotection (c) rejection and punishment. Each dimension consists of six items that are rated on a four point Likert-type scale. The reliability for each scale showed satisfying Cronbach Alphas (emotional warmth: $\alpha = .932$; control and overprotection: $\alpha = .835$; rejection and punishment: $\alpha = .842$). Because of the quite similar means of each dimension for father and mother within this sample, the statistic calculations were done for both together and were furthermore identified as “common parental rearing behaviour”. The mean score at the common dimension of emotional warmth was 42.92 ($SD = 10.3$), whereas the possible scores for each of the three scales can reach from 16 to 64. The mean score of the dimension control and overprotection was 27.4 ($SD = 6.94$) and that of the rejection and punishment scale was 22.2 ($SD = 5.76$). High scores mean a high consent to the degree of each dimension.

The list of *life events* was newly developed. They were taken from the “Leipziger Ereignis- und Belastungsinventar (LEBI)” by Richter and Guthke (1995), from the study of Catlin & Epstein (1992) as well as out of brainstorming. The measure intends to allow respondents to indicate life events over the whole biography. Thus the scale has three portions and was constructed as follows: Section 1 contains a list of 57 specific events plus enough space to assign those events which can be experienced more than one time in a life span. Section 2 facilitated to noting more significant events that respondents may have experienced. Section 3 was a list to allocate non-events, which means wished for but not achieved experiences.

For each reported event the following parameters were questioned: a) the *age* at which the event occurred, with the following age-categories: 0-5, 6-10, 11-15, 16-20, 21-30, 31-40, 41 or over. b) The subjective appraised parameter of *favourability* at two different times: the time the event occurred and the appraisal today: the appraisal took place from very positive (+2) to neutral (0) to very negative (-2).

Within this study the mean number of reported events was 21.26 ($SD = 11.01$), with a maximum of 76 and a minimum of one ($N = 227$).

The list of all reported life events can be taken from the Appendix at the end of this article, including the descriptive data and the analyses of significance. It includes all items of the LEBI. Events that were taken from other sources are noted.

Dispositional coping was assessed by the Brief COPE by Carver (1997a, 1997b). It is the abbreviated version of the previously published measure called COPE Inventory (Carver, Scheier & Weintraub, 1989). The Brief COPE adds one scale and omits two scales of the full COPE, and reduces others to two items per scale. Psychometric properties reported are derived from a sample of adults participating in a study on the process of recovery after Hurricane Andrew, from research with breast cancer patients and from other samples as well. Each one of the 14 scales of the Brief COPE consists of two items that are rated on a four point, Likert-type scale. The Table 1 shows the 14 scales, the Chronbach Alphas of each scale and the statistical mean scores within the present study. The scores of each scale can reach from 2 to 8.

Table 1. Reliability of the 14 coping strategies and mean scores within the present sample ($N = 227$).

Coping strategies	Chronbach's Alpha	Mean	Standard Deviaton
Self-Distracton	.620	4.91	1.40
Active Coping	.620	6.52	1.14
Denial	.426	3.77	1.28
Substance Use	.908	3.14	1.55
Using Emotional Support	.736	6.06	1.39
Using Instrumental Support	.728	5.75	1.39
Behavioral Disengagement	.613	3.40	1.15
Venting	.641	5.48	1.38
Positive Reframing	.707	5.56	1.44
Planning	.655	6.56	1.15
Humor	.784	4.20	1.65
Acceptance	.566	6.17	1.18
Religion	.807	3.69	1.81
Self-blame	.722	5.26	1.45

Results

The meaning in life and demographic variables

To examine whether demographic variables are differentially associated with the sense of meaning in life various analysis were made. Out of the one-tailed Pearson correlation the age was related positively to the score of subjective meaning in life ($p < .000$, $r = .252$). Statistical analysis for marital status, romantic relationship and the existence of own children were also significant. The post hoc analysis of the univariate analysis of variance (ANOVA), which was conducted to examine differences in marital status, specified the significant effect ($p < .000$, $df = 225$, $F = 9.420$) that married subjects had significantly higher meaning levels than single or divorced ones. To determine whether being in a romantic relationship was associated with a different sense of meaning in life a t-test was performed, in which subjects were divided into those who reported being and not being in a romantic relationship at the time they were questioned. Being in a romantic relationship was associated with more favourable levels of meaning in life ($p < .024$, $df = 227$, $t = -2.236$). Out of Spearman's correlation the length of the relationship was also related positively to the subjective meaning in life ($p < .007$, $r = .219$). The strongest effect had the existence of own children, as revealed by the t-test ($p < .000$, $df = 225$, $t = 4.494$). Thus having children was associated with more favourable levels of subjective meaning in life. The effects of gender ($p < .963$), education ($p < .839$), profession ($p < .174$) and primary caregiver ($p < .443$) were not statistically significant.

Current sense of meaning in life and previous life events

To determine whether the occurrence of specific events was associated with favourability of current sense of meaning in life, a series of t-tests was conducted in which subjects were divided into those who did and those who did not report experiencing an event, and in which the meaning of life constituted the dependent variable. Significant differences were found for several events.

Table 2. Major life events, where those reporting it had higher scores on meaning in life than those not reporting the event (t-test, $N = 227$).

Nr.	Event	n_1	p	t	Mean Difference	Favourability Mean*	SD
1.1	Birth of a Child	65	.000	-4.81	9.2	9.3	1.3
1.2	Birth of a 2. Child	31	.000	-4.18	10.6	9.6	0.7
1.3	Birth of a 3. Child	12	.002	-3.09	12.1	9.0	1.4
4.1	Death of a close Friend	64	.036	-2.15	4.2	4.0	1.6
5.1	Mother's Death	26	.029	-2.20	6.2	3.8	1.5
5.2	Father's Death	52	.040	-2.06	4.4	4.4	1.7
29.1	Son/Daughter Moves Out	24	.003	-2.93	8.5	6.2	2.0
32.1	Troubles with Children	16	.015	-2.43	8.7	4.6	1.8
38.1	Marriage or Engagement	64	.000	-3.73	7.2	8.0	2.8
38.2	2. Marriage or Engagement	12	.009	-2.62	10.5	8.3	2.1
47.2	2. Major Change at Workplace	12	.049	-1.98	8.2	8.0	2.3
48.3	3. Change of the Job	17	.042	-2.05	7.1	9.4	1.1
51.1	Major Career Success	67	.001	-3.35	6.4	9.5	0.9
54.1	Natural Disaster	11	.007	-2.74	11.2	3.9	2.4

Notes. n_1 sample size of the group who experienced the event;* Scores range from: (2) very negative (5-6) neutral (10) very positive

Table 2 displays the list of events where those subjects who reported to have experienced the event in question had more favourable meaning in life than those who did not. The life events which correspond to significantly less sense of meaning in life if reported are shown in Table 3.

Table 3. Major life events, where those reporting it had lower scores on meaning in life than those not reporting the event (*t*-Test, *N* = 227).

Nr.	Event	<i>n</i> ₁	<i>p</i>	<i>t</i>	Mean Difference	Favourability	
						Mean*	<i>SD</i>
12.1	Mental Disorder, Own	74	.001	3.27	6.1	4.1	1.8
12.2	2. Mental Disorder, Own	13	.000	3.74	14.6	4.0	1.8
13.2	2. Mental Disorder, Other's	20	.013	2.52	7.8	3.3	1.3
15.1	Physical Disease , Own	54	.050	1.97	4.3	4.3	1.8
61	Romantic Relationship-unfulfilled	60	.005	2.81	5.6	4.3	1.6
63	Unfulfilled desire to have children	19	.001	3.39	10.7	4.0	1.9

Notes. *n*₁ sample size of the group who experienced the event; *Scores range from: (2) very negative (5-6) neutral (10) very positive

No significant differences were found between the groups concerning the other life events. The results of the non-significant events are shown in the appendix. However, it must be mentioned that some events were excluded from statistical analysis, due to the too small sample sizes. This especially concerns different traumatic life events like the death of one's own child or the death of a brother or sister, being a victim of a violent crime, critical diseases or injuries of the partner or one's own child, accidents, rapes, wartime experiences and suicide attempts. Also spiritual and paranormal experiences are infrequently reported. But all these events are at least integrated in the examination of cumulative effects of multiple life events within specific life areas.

Multiple life events and current sense of meaning in life

To examine the possibility of cumulative effects of multiple life events, a Favourability of Life Events Score (FLES) was calculated. This was done by adding all scores of appraised life events and dividing this sum through the number of reported life events. Resulting scores range from 3.79 to 9, with a mean of 6.23 (*SD* = 0.96).

A regression analysis was performed to determine the extent to which the favourability of life events contributed to the current belief of meaning in life. The outputs showed a significant result ($p < .000$, $F = 44.646$, $R^2 = .163$, $B = 5.677$; $Beta = .408$). A more favourable FLES was associated with a more favourable level of personal meaning in life. The mean score of the favourability of life events account for 16 % of the observed variance.

An essentially similar pattern of results was produced when a stepwise regression analysis was made with the number of positive (Scores from 2 – 4), neutral (Scores from 5 – 7) and negative (Scores from 8 – 10) events as independent variables. For the positive and for the negative events the regression analysis showed a significant model ($p < .000$, $F = 47.02$, $R^2 = .169$). The variables were shown in the following order: 1) Number of positive events ($p < 0.00$, $B = 1.034$, $Beta = .386$) and 2) Number of negative events ($p < .000$; $B = -.791$, $Beta = .305$). A greater number of positive events was consistently associated with more favourable levels of meaning in life, and a greater number of negative events was consistently associated with less favourable levels.

According to the cumulative effect on meaning in life the events within specific life areas were also of considerable interest. Therefore the values of six different life areas, to which the life events can be related to, were specified. Table 4 displays the descriptive values and frequency distributions of these areas.

Table 4. Descriptive values and frequency distribution of life events within the six different areas of life (*N* = 227).

Life Areas	<i>N</i>	Percent	Mean	<i>SD</i>	Min.	Max.
General Social Situations	1031	21.4%	4.54	2.72	0	14
Situation of Job and Career	1090	22.6%	4.80	3.45	0	23
Love and Partner-Situations	1007	20.9%	4.44	3.01	0	14
Family-Situations	768	15.9%	3.38	2.61	0	15
Traumatic Life Events	912	18.9%	4.02	3.14	0	22
Spiritual, Paranormal and Self-awareness	13	0.3%	0.06	0.29	0	3
Total	4821	100 %	20.9	11.26	1	76

Notes. *N* = Number of life events within a specific area. The Percentages are related to the total sum of life events.
Min = minimal number of reported life events within a specific life area. Max = maximal number of reported life events.

The stepwise regression analysis that was made to determine a cumulative effect of life events within a specific life area produced a significant result for the number of family situations and the number of traumatic life events ($p < 0.008$; $F = 5.000$; $R^2 = 0.43$). The variables were shown in the following order: 1) Number of family situations ($p < 0.004$; $B = 1.097$; $Beta = .206$) and 2) Number of traumatic life events ($p < 0.025$; $B = -.681$; $Beta = -.160$). A greater number of life events within the family was consistently associated with more favourable levels of meaning in life, and a greater number of traumatic events was consistently associated with less favourable levels of meaning in life. It must also be mentioned that the result is not utterly consistent with the descriptive average of favourability of life events (FLES). As shown in Table 5 the family situations were appraised as less favourable as events from other areas, except traumatic life events.

Table 5. Average FLES scores within a specific life area.

Life Areas	Mean*	SD	Variance	MD	Min.	Max.
General Social Situations	7.49	1.37	1.87	7.6	2	10
Situation of Job and Career	7.43	1.69	2.85	7.5	2	10
Love and Partner-Situations	6.50	1.73	3.00	6.4	2	10
Family-Situations	5.09	1.42	2.01	5.0	2	10
Traumatic Life Events	4.10	1.26	1.59	4.0	2	10
Spiritual, Paranormal and Self-awareness	6.47	3.47	12.00	6.5	3	10
Total	6.23	0.96	0.93	6.2	3.79	9

Notes. * Very negative (2) neutral (5-6), very positive (10).

Min. = most minimal value within this sample. Max- = most high value within this sample.

The relation of the sense of meaning in life, life events and relationships with parents

A general linear univariate model (GLM) was performed to determine the extent to which life events and relationships with parents contributed, both independently and in combination, to current sense of meaning in life. Therefore the three parental rearing behaviour scales were evenly divided into two groups. The favourability of life events score (FLES) was cut into three different groups. To build a group of average positive, neutral and negative exposure of life events, the cut-off points were selected with regard to content considerations and the attempt to make quite similar group sizes. The frequency distribution is shown in Table 6.

Table 6. Frequency distribution of the sample within the three groups of appraised average exposure of life events. ($N = 227$).

Category	Mean Scores	n	Percent
Negative exposure	2.00 – 5.80	74	32.6 %
Neutral exposure	5.81 – 6.80	92	40.5 %
Positive exposure	6.81 – 10.00	61	26.9 %
Total		227	100.0 %

Note. n = Sub-sample size

In the GLM the general meaning of life was the dependent variable. The dichotomous dimensions of parental rearing behaviours and the categories of average favourability of life events were the independent variables. Because of the significant correlation of the age with the degree of personal sense of meaning in life, the age was included as covariate.

The results are summarized in Table 7. The favourability of life events, the age and the parental rearing behaviour of emotional warmth as main effects, were significantly positively associated with the general sense of meaning in life. In addition the parental rearing behaviour of emotional warmth made a significant two-way interaction with the favourability of life events. The two other dimensions of parental rearing behaviour indicated no significant effects.

Table 7. Results of the GLM – Univariate for general Meaning of Life as a function of parental Emotional Warmth, parental Control and Overprotection, parental Rejection and Punishment, Favourability of Life Events (FLE), and Two-Way Interactions (N =205).

Indipendent Variable	df	F	Significance	(Eta-Quadrat) η^2
Age	1	15.456	.000	.079
FLE_m	2	15.757	.000	.148
Emotional Warmth	1	7.119	.008	.038
Rejection and Punishment	1	0.000	.988	.000
Control and Overprotection	1	0.133	.715	.001
FLE * Emotional Warmth	2	4.847	.003	.061
FLE * Rejection and Punishment	2	2.773	.065	.030
FLE * Control and Overprotection	2	1.951	.145	.021

$R^2 = .364$ Adjusted $R^2 = .279$

As shown in Figure 1, there is a significant difference between subjects who reported high and low parental emotional warmth, if they were confronted with in average more negative life events. Thus, for subjects who reported high parental emotional warmth, current belief in meaningfulness of life was comparatively better than those who reported less parental emotional warmth. According to the group with average neutral or positive life events there is no significant two-way interaction between parental warmth and the impact of life events. The existing significant mean-difference is caused by the main effect of the favourability of life events.

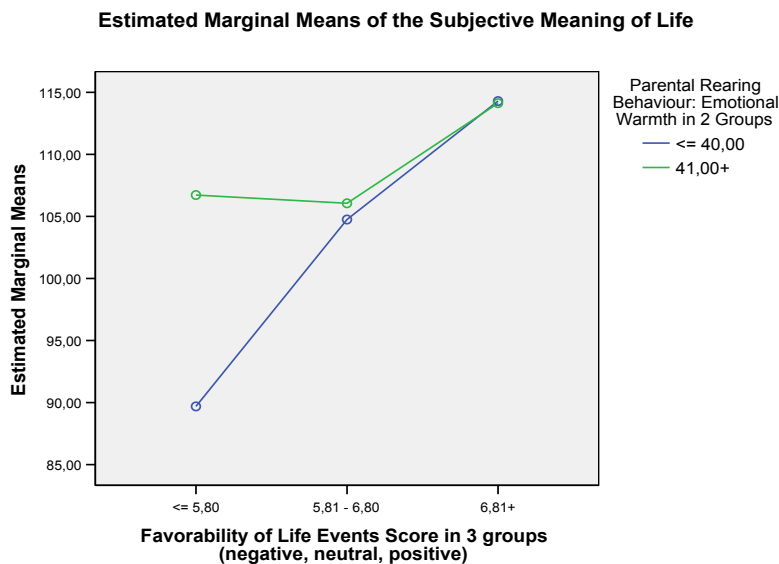


Figure 1. Significant interaction between favourability of life events and parental emotional warmth.

Meaning of life and coping

To distinguish people with high and low sense of meaning in life, the subjects were divided into two equal groups. The cut-off point was the median ($MD = 108$) of the PIL scale. For each of the 14 sub-scales of the Brief COPE a t-test was calculated, in which the dichotomized groups of meaning was the independent variable. Some significant differences were found. Subjects with the high degree of experience of meaning in life showed a highly significant tendency towards active coping ($p < .000$, $t = -5.11$),

positive reframing ($p < .000$, $t = -4.04$), planning ($p < .000$, $t = -3.98$) and the use of religion ($p < .006$, $t = -2.76$). Subjects with a lower meaning experience were inclined to behavioural disengagement ($p < .000$, $t = 4.66$), self-blame ($p < .001$, $t = 3.32$), denial ($p < .014$, $t = 2.49$) and substance use ($p < .042$, $t = 2.05$). No differences were found regarding to strategies like self-distraction ($p < .066$), the use of emotional ($p < .732$) as well as instrumental support ($p < .422$), venting ($p < .556$), humour ($p < .754$) and acceptance ($p < .289$).

Conclusion and discussion

This research set out to explore the relation of subjective meaning in life to reports of significant life events and reports of childhood relationships with parents, as well as other connecting variables like demographical ones and reports of dispositional coping-strategies. The results show similarities with previous findings though they also indicate some differences.

The *first hypothesis* focused on demographic variables that had various effects on the level of subjective meaning in life. The produced significant positive correlation of age was consistent with predictions and previous findings (DeWitz, 2004; Schmitz & Hauke, 1999), where older participants tended to report greater meaning in life than younger ones. Theorists and researchers observed that in the face of disability and loss that often accompany advancing age, personal meaning becomes a major source of life-satisfaction and personal growth (Wong, 1998). Qualitative research proved that the increased sense of meaning is linked to spirituality, wisdom and self-acceptance (Wong, 1998). These are important factors for significant life goals and a source of life-satisfaction especially for elderly people (Dittmann-Kohli & Westerhof, 2005).

The present findings showed that a higher level in the subjective meaning of life can be found in people who enjoy a romantic relationship, especially when they were married, which is consistent with some theoretical considerations, on for example Frankl's (1985) or Grom and Schmidt's (1975). Accordingly, love and sharing life with someone important is a value through which people experience a deep and fulfilling meaning in life. Qualitative studies have also consistently confirmed the significance of social relationships as by far the most frequent source of meaning across the life span (Ebersole, 1998; Debats & Hansen, 1995; O'Connor & Chamberlain, 1996).

Within the demographical analysis the strongest significant difference in life purpose was found between those subjects with own children and those without. The significantly higher level of subjective meaning in life of those who had children is consistent with the mentioned statement and point towards the self-transcendent aspect of meaning in life (Frankl, 1987).

In summary, the answer of the first hypothesis is that meaning in life accumulates not only with increasing age, but also from romantic relationship, marriage and children. According to previous studies (De Witz, 2004), differences in sex, education, profession and reported primary caregivers during childhood, are not significant factors to explain meaning in life.

The *second hypothesis*, that certain life events are associated differently with various levels of meaning in life, was also confirmed for 16 life events. These results suggest that some events are more relevant to the subjective meaning of life than others. Most, but not all differences were found where they were expected. Experiencing negative life events, like mental disorders (own and those of others), physical diseases, unfulfilled romantic relationships and desires to have children, were associated with less favourable meaning in life. That psychopathology is significantly related to a lack of meaning was to be expected. A lot of previous researches confirm these findings (O'Connor & Chamberlain, 1996). The experience of positive life events like birth of a child (the more the merrier), marriage or engagement, changes at work and a major success was associated with more favourable levels of meaning in life in the present study. These results were adequate to the average subjective appraisal of each event. Some other life events like death of a close friend, death of the mother or father, troubles with children and natural disaster were associated with higher levels of meaning in life as well, though in average appraised negative. At first these findings might seem to be paradoxical. But theories as well as research consistently refer to the meaning aspect of suffering (Frankl, 1987; Folkman, 1997; Park & Folkman, 1997). Getting in touch with death is something that can be constructive for finding meaning. The awareness of mortality makes life valuable, precious and unique. More detailed explanations for these results will be made in connection with the findings out of multiple life events, as follows.

The *third hypothesis* was that positive and negative events have a cumulative effect on the subjective meaning in life. This hypothesis was also borne out by the data. Those reporting more positive events, less negative events, and/or a more favourable balance of positive and negative events had uniformly more positive meaning in life. This evidence for a cumulative effect of life events on the sense of meaning in life is consistent with Catlin and Epstein's (1992) findings.

The cumulative effect of life events within specific life areas, which was verified for traumatic events in an unfavourable direction on the level of meaning and for family-situations in a favourable sense, overlaps with the findings of Janoff-Bulman (1989; Park & Folkman, 1997), where traumatic life events had a negative effect on basic beliefs. Also, theoretically the destructive impact of traumatic life events is indicative on the stability of perception, of the self and the world in a manner where positive beliefs about

the future become difficult (Friedmann, 2004; Wirtz & Zöberli, 1995). For the positive effect of family situations no previous research can be taken into account. On the one hand it is comprehensible that the birth of a child is connected with more sense of meaning in life, it is an event which was not only consistently appraised very positively but also confirmed by demographic variables as significantly positive. On the other hand most of the reported family events were not appraised as favourable, like the death of someone close or troubles with children. One explanation of this apparently inconsistent finding is that stressful and threatening events concerning the family may have a significant impact on the willingness to personal growth. Furthermore the evidence of social support as a protective environmental factor in the coping process (Carver, Scheier & Brissette, 2002) can be supposed to be received from within the family. Taking into account Frankl's (1987) postulate, that there is a meaning even in suffering, overcoming such a challenging situation would likely lead to a greater sense of meaning.

Fourthly, it was hypothesized that favourable childhood relationships with parents are positively associated with favourability of current meaning in life and *fifthly* that these relationships have a moderating effect on the influence of life events. As expected, reports of favourable childhood relationships with parents were shown to be positively related to the favourability of current meaning in life. More precisely the parental rearing behaviour of emotional warmth seems to have had a buffering effect on the influence of negative life events. It is noteworthy that this result disproves the findings of Catlin and Epstein (1992). According to them, life events have no consistent effect on the subjective meaning of life, when people report less experienced parental acceptance and love during the childhood. But "for people who reported high parental acceptance, an orderly response to events appears to be operative" (Catlin & Epstein, 1992, p. 205). The present finding runs counter to this statement but gives support to existing theories and therapeutic assumptions. Accordingly, positive relationships with parents foster the development of ego strength and sense of meaning in life, which is assumed to contribute to the ability to cope with the vicissitudes of life. Conversely, a lack of emotional warmth during childhood makes one's sense of meaning more vulnerable and less resilient. The world may be viewed as more capricious and uncontrollable. But nobody is condemned to less meaning in life because of the parental rearing behaviour. People can develop and grow because of later and more favourable experiences and because the attainment of personal goals. Within the present study the favourability of life events as a main effect were significantly positively associated with the general sense of meaning in life. If the average balance of life events is neutral or positive, this main effect is no longer buffered by the parental rearing behaviour. Also, those who remember less parental love and care benefit from positive and desirable life events by having an increased meaning in life.

Finally, the findings support the *sixth* and last hypothesis that humans maintaining their personal meanings in life are significantly more successful with positive reframing, practicing religion and coping strategies such as planning and mastering of threatening life events. In contrast defence strategies, like denial, substance use and behavioural disengagement, as well as self-blame, were significantly associated with lower levels of meaning experience. By and large these results are consistent with previous research in the context of meaning related coping (Ardelt, 2003; Dufton & Perlman, 1986; Folkman & Moskowitz, 2000; Klinger, 1998; Schmitz & Hauke, 1999; Schmitz, et al. 2000; Taylor, 1983; 2000). Contrary to the results of Schmitz et al. (2000), the use of emotional and instrumental support is not a significant strategy in favour of higher or lower levels of meaning in life.

The types of coping which were positively associated with the sense of meaning in life within the current study all involve the activation of beliefs, values or goals which help define the positive significance of events. Out of the perspective that basic assumptions serve as guides for our behaviour (Janoff-Bulman & Schwartzberg, 1991; Silver & Wortman, 1989), meaning in life is associated with optimism and with the ability to overcome hardships. The more sense of meaning in life the merrier is the adjustment to personal tragedies. As Schmitz and Hauke (1999) have argued, our conceptual systems are hierarchically organized with higher and lower order postulates. The meaning in life represents our highest order postulates. It is the most abstract, global, generalized assumption that we hold and it is the foundation of the system. Here changes become more difficult. When this global and generalized meaning in life is positively distinct it cannot be affected significantly by stressful episodes. Active and problem related coping is still possible. But if there is not such an abstract and global meaning, the lower postulates are more subjected to the direct test of experience. Troubles and failures lead to deconstruction and loss of meaning because the self-worth is already affected on this lower order of postulates. If somebody whose only meaning in life is to be a good basketball player breaks his leg or even loses it, he has a higher potential of losing his meaning in life than someone who has the same endeavour, but higher order postulates as well, like "I am a good person" (Janoff-Bulman & Schwartzberg, 1991, p. 489).

Concluding remarks

In summary, experienced life events that are associated as significant with increased personal meaning of life are mostly found in intimate relationships with others, like family and beloved ones.

Aspects of responsibility, control and inner freedom of choice seem to be important to experience meaning when people cope and adjust to personal life events. This inner freedom to discover meaning can be restricted, e.g. by mental problems and

disorders, as well as by overwhelming traumatic events. But in some cases, especially in family affairs, there is also a potential of finding meaning in suffering. A predisposition factor for adjusting well through negative life events is the experienced childhood relationship with parents. The parental rearing behaviours of love and care strengthen the sense of meaning and can be seen as a fortunate condition to struggle with stressful and threatening episodes in later life. The varied findings of this study give evidence that on the one hand the global meaning in life pertains to people's assumptions about order, including the distribution of negative and positive events. On the other hand meaning can also be found through the pursuit or attainment of important goals (Carver, Scheier & Brissette 2002; Folkman, 1997). This motivational dimension of meaning, the sense of purpose, is considered to be a powerful predictor of general life adjustment (Wong, 1998). One can endeavour to meet events and conditions that are favourable and meaningful. The significant main effect of positive life events to a higher sense of meaning in life is independent of the parental rearing behaviour. This supports the view that attained favourable life events are responsible for experiencing meaning for all people.

Aside from the conclusion, that the experience of certain events cause changes in the personal sense of meaning in life, it is also possible that existing beliefs contribute to the experience of events or that further factors contribute to beliefs and the experience of events and rearing behaviour. It is always problematic to make causal inferences from data that are essentially correlational. Because of this the interaction of variables should not be seen as unidirectional. Each event is embedded in a social and cultural environment and the very individual biography. In formulations of the transactional model, person and environment are in a mutually reciprocal, bi-directional relationship (Lazarus, 2000; Park & Folkman, 1997). Thus, biographical events are influencing the personal development and dispositional differences are expressed in preference for particular environments and developmental niches. In some events the subjects are presumably active agents, in others more like victims. To accurately examine the immediate effects of major life events, as well as how those effects change over time, longitudinal research is necessary. Such research should serve to confirm, refute, or elaborate the interpretations that are offered here.

A further limitation of this study is the generalisability of the sample. As the descriptive values show, most of the subjects had a high level of meaning in life, while questioned. A reason for this outcome could be the effect of demand characteristics, which brings forward socially acceptable answers. A further condition is probably the field access. Some people did not complete the questionnaire feeling it to be too confronting. To survey such a sensible topic in a non-therapeutic surrounding seems to be not ethical for these specific people. Therefore, life events, coping, parental rearing behaviour as well as meaning in life, are not collected sufficiently. The relatively high educational level of the subjects is also critical within the current research. The current study as well as previous studies (De Witz, 2004) shows no significant correlation between meaning in life and education level, but further research is needed. Moreover the age of the subjects is not higher than 64 years old. The effects revealed by the present analysis were low to medium. Maybe a comparison of extreme groups would lead to stronger effects. The same questionnaires should be given to different populations to compare the results with those presented here.

References

- Antonovsky, A. (1984). A call for a new question – salutogenesis – and a proposed answer – the sense of coherence. *Journal of Preventive Psychiatry*, 2, 1-13.
- Ardelt, M. (2003). Effects of religion and purpose in life on elders' subjective well-being and attitudes toward death. *Journal of Religious Gerontology*, 14 (4), 55-77.
- Auhagen, E. (2000). On the psychology of meaning of life. *Swiss Journal of Psychology*, 59 (1), 34-48.
- Benesch, H. (1990). *Warum Weltanschauung. Eine psychologische Bestandsaufnahme*. Frankfurt am Main: Fischer Verlag.
- Bower, J. E., Kemeny, M. E., Taylor, S. E., Fahey, J. L. (1998). Cognitive Processing, discovery of meaning, CD4 decline, and AIDS-related mortality among bereaved HIV-seropositive men. *Journal of Consulting and Clinical Psychology* Vol. 66 (6), 979-986.
- Brandstädter, J. (2003). Zeit, Handeln und Sinn: Veränderung der Zeit- und Zukunftsperspektive im Alter. In N. Groeben (Eds.), *Zur Programmatik einer sozialwissenschaftlichen Psychologie*, (Band II). (S. 241-254). Münster: Aschendorff.
- Bucher, A. (2009): Empirische Psychologie der Spiritualität: Möglichkeiten und Grenzen – ein Forschungsüberblick. In A. Reiter & A. Bucher (Eds.), *Psychologie – Spiritualität – interdisziplinär*. Eschborn: Verlag Dietmar Klotz.
- Carver, C. S. (1997a). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, 4, 92-100.
- Carver, C. S. (1997b). Brief COPE. Available at <http://www.psy.miami.edu/faculty/ccarver/sclBrCOPE.html>. [Retrieved 02 March, 2008]
- Carver, Ch. S., Scheier, M. F., Brissette, I. (2002). The role of optimism in social network development, coping, and psychological adjustment during a life transition. *Journal of Personality and Social Psychology*, 82(1), 102-111.
- Carver, C. S., Scheier, M. F., Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267-283.
- Catlin, G., Epstein, S. (1992): Unforgettable experiences: the relation of life events to basic beliefs about self and world. *Social Cognition*, 10, 189-209.
- Chamberlain, K. & Zika, S. (1988). Measuring meaning in life: an examination of three scales. *Personality and Individual Differences*, 9, 589-596.
- Crumbaugh, J. C. & Henrion, R. (1988). The PIL Test: Administration, interpretation, uses, theory, and critique. *The International Forum for Logotherapy*, 11, 76-88.
- Crumbaugh, J.C. & Maholick, L. (1964). An experimental study in existentialism: The psychometric approach to Frankl's concept of noogenic neurosis. *Journal of Clinical Psychology*, 20, 200-207.
- Dittmann – Kohli, F., Westerhof, G. (2005). Persönliche Sinngebung über die Lebensspanne. In H. G. Petzold & I. Orth (Eds.), *Sinn, Sinnesführung, Lebenssinn in Psychologie und Psychotherapie* (Band I). (S. 157–189). Bielefeld und Locarno: Edition Sirius.
- Debats, D. L., Drost, J., Hansen, P. (1995). Experiences of meaning in life. A combined qualitative and quantitative approach. *British Journal of Psychology*, 86, 359 – 375.
- De Witz, S. J. (2004). *Exploring the relationship between self-efficacy beliefs and purpose in life*. Dissertation, The Ohio State University.
- Duften, B. D., Perlman, D. (1986). The Association between Religiousness and the Purpose-in-Life Test: Does it Reflect Purpose or Satisfaction? *Journal of Psychology and Theology*, 14, 42-48.
- Emmons, R. A., Colby, P. M., Kaiser, H. A. (1998). When losses lead to gains: Personal goals and the recovery of meaning. In T. P. Wong & Fry, P. S. (Eds.), *The human quest for meaning. A handbook of psychological research and clinical applications* (S. 163-178). Mahwah, N.J. Erlbaum.
- Ebersole, P. (1998). Types and depth of written life meanings. In T. P. Wong & Fry, P. S. (Eds.), *The human quest for meaning. A handbook of psychological research and clinical applications* (S. 179-191). Mahwah, N.J. Erlbaum.
- Fillip, S. H. (1995). *Kritische Lebensereignisse*. München: Beltz.
- Folkman, S. (1997). Positive psychological states and coping with severe stress. *Soc. Sci. Med.*, 45 (8), 1207-1221
- Folkman, S., Moskowitz, J. T. (2000): Positive affect and the other side of coping. *American Psychologist*, 55 (6), 647-654.
- Frankl, V. (2005). *Der Wille zum Sinn*. Bern: Huber, Hogrefe AG.

- Frankl, V. (1987). *Das Leiden am sinnlosen Leben*. Freiburg: Herder.
- Frankl, V. (1985). *Der Mensch vor der Frage nach dem Sinn*. München: Piper.
- Frankl, V. (1982). *Ärztliche Seelensorge. Grundlage der Logotherapie und Existenzanalyse* (10. Auflage). Wien: Deuticke.
- Friedmann, A. (2004). Allgemeine Psychotraumatologie. In A. Friedmann, P. Hofmann, B. Lueger-Schuster, M. Steinbauer, & D. Vyssoki (Eds.), *Psychotrauma. Die Posttraumatische Belastungsstörung* (S. 5-34). Wien & New York: Springer.
- Grom, B. & Schmidt, J. (1975). *Auf der Suche nach dem Sinn des Lebens*. Freiburg: Herder zVerlag.
- Ironson, G., Stuetzle, R., Fletcher, M. A. (2006): An Increase in Religiousness/Spirituality Occurs After HIV Diagnosis and Predicts Slower Disease Progression over 4 Years in People with HIV. *Journal of General Internal Medicine*, 21(5), 62 – 67.
- Janoff-Bulman, R. & Schwartzberg, S. S. (1991): Toward a general model of personal change. In C.R. Snyder, D.R. Forsyth (Eds.), *Handbook of social and clinical psychology. The health perspective* (S. 488-505). Elmsford, NY: Pergamon Press.
- Janoff-Bulman, R., & Wortman, C. B. (1977). Attributions of blame and coping in the „real World“: Sever accident victims react to their lot. *Journal of Personality and Social Psychology*, 35, 351-363.
- Kennedy, J. E., Kanthamani, H., Palmer, J. (1994). Psychic and Spiritual Experiences, Health, Well-Being, and Meaning in Life. *The Journal of Parapsychology*, 58, 353-383.
- Lazarus, R. S. (2000). Toward better research on stress and coping. *American Psychologist*, 55 (6), 665-673.
- Lazarus, R. S. (1981). Little hassles can be hazardous to your health. *Psychology today*, 6, 58 – 62.
- Meier, P. (1992). *Sinnsuche und Sinnfindung im Umfeld eines kritischen Lebensereignisses. Die Krebserkrankung als Sinnkrise*. Regensburg: S. Roderer Verlag.
- O'Conner, K. & Chamberlain, K. (1996). Dimensions of life meaning: A qualitative investigation at mid-life. *British Journal of Psychology*, 87, 461-477.
- Park, C. L. & Folkman, S. (1997): Meaning in the context of stress and coping. *Review of General Psychology*, 1(2), 115-144.
- Richter, V. & Guthke, J. (1995). *Leipziger Ereignis- und Belastungsinventar (LEBI)*. Göttingen: Hogrefe.
- Schmitz, E. (2005). Sinnkrisen, Belastung, Lebenssinn – psychologische Perspektiven, Konzepte und Forschung. In H. G. Petzold & I. Orth (Eds., 2007), *Sinn, Sinnerfahrung, Lebenssinn in Psychologie und Psychotherapie* (Band I). (S. 123–156). Bielefeld und Locarno: Edition Sirius.
- Schmitz, E., & Hauke, G. (1999): Sinnerfahrung, innere Langeweile und Modi der Stressverarbeitung. *Integrative Therapie – Zeitschrift für vergleichende Psychotherapie und Methodenintegration* 25, 1, 42-63.
- Schmitz, E., Arnold M., Jahn R., Müller, J. (2000): Persönliche Sinnstrukturen und die Bewältigung kritischer Lebensereignisse. *Integrative Therapie – Zeitschrift für vergleichende Psychotherapie und Methodenintegration* 26(4), 451-470.
- Schumacher, J. (2002). *Perzipiertes elterliches Erziehungsverhalten. Konzeptualisierung, diagnostische Erfassung und psychologische Relevanz im Erwachsenenalter*. Frankfurt am Main: Peter Lang.
- Schumacher, J., Eisemann, M., Brähler, E. (1999). Rückblick auf die Eltern: Der Fragebogen zum erinnerten elterlichen Erziehungsverhalten (FEE). *Diagnostika*, 45, 194-204.
- Silver, C. B., Wortman, R. C. (1989). The myths of coping with loss. *Journal of Consulting and Clinical Psychology*, 57(3), 349-357.
- Taylor, S. E. (1983). Adjustment to threatening events. A theory of cognitive adaptation. *American Psychologist*, 38, 1161-1173.
- Taylor, S. E., Kemeny, M. E., Reed, G. M., Bower, J. E., Gruenewald, T. L. (2000). Psychological Resources, positive illusions, and health. *American Psychologist*, 55(1), 99-109.
- Thompson, S. C. (1991): Toward a general model of personal change. In Snyder, C.R., Forsyth, D. R. (Ed.), *Handbook of social and clinical psychology. The health perspective* (S. 607-623). Elmsford, NY: Pergamon Press.
- Wirtz, U. & Zöberli, J. (1995): *Hunger nach Sinn. Menschen in Grenzsituationen. Grenzen der Psychotherapie*. Stuttgart: Kreuz Verlag.
- Wong, T.P (1998). Implicit theories of meaningful life and the development of personal meaning profile. In T. P. Wong & P. S. Fry (Eds.), *The human quest for meaning. A handbook of psychological research and clinical applications* (S. 111-139). Mahwah, N.J. Erlbaum.

Appendix

List of reported life events ($N = 227$)

Nr.	Life Event	n_1	Percent	Appraisal (BW)		p
				M	SD	
1.1	Geburt eines Kindes	65	28.1 %	9.3	1.3	.000
1.2	Geburt eines 2. Kindes	31	13.4%	9.6	0.7	.000
1.3	Geburt eines 3. Kindes	12	5.2 %	9.0	1.4	.002
1.4	Geburt eines 4. Kindes	3	1.3 %	7.3	3.1	-
1.5	Geburt eines 5. Kindes	2	0.9 %	8.5	0.7	-
1.6	Geburt von Enkelkindern	2	0.9 %	10.0	0.0	-
1.7	Geburt von Enkelkindern	1	0.4 %	10.0		-
1.8	Geburt von Neffe/Nichte	2	0.9 %	9.5	0.7	-
2	Tod des Lebensgefährten	3	1.3 %	3.0	1.7	-
3.1	Scheidung/Trennung von Partner (Konflikt)	107	46.3 %	5.8	2.1	.589
3.2	2. Scheidung/Trennung von Partner (Konflikt)	50	21.6 %	5.6	2.1	.951
3.3	3. Scheidung/Trennung	19	8.2 %	6.5	2.0	.679
3.4	4. Scheidung/Trennung von Partner (Konflikt)	13	5.6 %	5.6	1.9	.402
3.5	5. Scheidung/Trennung von Partner	7	3.6 %	4.4	1.3	-
4.1	Tod eines guten Freundes	64	27.7 %	4.0	1.6	.036
4.2	Tod eines 2. guten Freundes	13	5.6 %	4.1	1.1	.680
4.3	Tod eines 3. guten Freundes	6	2.6 %	4.2	1.1	-
4.4	Tod eines 4. guten Freundes	3	1.3 %	3.7	1.5	-
4.5	Tod eines 5. guten Freundes	1	0.4 %	4.0		-
5.1	Tod der Mutter	26	11.3 %	3.8	1.5	.029
5.2	Tod des Vaters	52	22.5 %	4.4	1.7	.040
5.3	Tod des Kindes	1	0.4 %	2.0		-
5.4	Tod des Bruders/ der Schwester	7	3.0 %	3.3	1.8	-
5.5	Tod der Großmutter	125	54.1 %	4.7	1.5	.777
5.6	Tod des Großvaters	116	50.2 %	4.8	1.5	.859
5.7	Tod eines anderen Familienmitgliedes	21	9.1 %	4.5	1.9	.393
6	Verurteilung zu einer Gefängnisstrafe	3	1.3 %	4.0	2.8	-
7	aktuelle Schwangerschaft	6	2.6 %	8.7	2.1	-
8	Scheidung der Eltern ¹	60	26.0 %	5.1	1.8	.314

Notes.

n_1 = sample size of the group who experienced the event

BW M - Scores range from: (2) very negative (5-6) neutral (10) very positive 2 – 10, SD = Standard deviation

p = Significance

¹ Event, which was taken from the study of Catlin und Epstein (1992).

Continuance: List of reported life events ($N = 227$)

Nr.	Life Event	n_1	Percent	Appraisal (BW)		p
				M	SD	
9.1	Ernste Krankheit/Verletzung des Partners	10	4.3 %	4.6	1.8	-
9.2	Ernste Krankheit/Verletzung der Mutter	50	21.6 %	4.1	1.7	.951
9.3	Ernste Krankheit/Verletzung des Vaters	49	21.2 %	3.8	1.5	.819
9.4	Ernste Krankheit/Verletzung Geschwister	18	7.8 %	4.1	1.5	.336
9.5	Ernste Krankheit/Verletzung der Großmutter	32	13.9 %	4.0	1.5	.550
9.6	Ernste Krankheit/Verletzung, Großvater	24	10.4 %	4.1	1.3	.334
9.7	Ernste Krankheit/Verletzung, Kind	7	3.0 %	3.3	1.4	-
9.8	Ernste Krankheit/Verletzung eines 2. Kindes	1	0.4 %	3.0		-
9.9	Krankheit/Verletzung, anderes Familienmitglied	8	3.5 %	3.0	1.1	-
10.1	Opfer eines schweren Verkehrsunfalls	23	10.0 %	4.5	1.4	.441
10.2	Opfer eines 2. schweren Verkehrsunfalls	1	0.4 %	3.0		-
11	Selbst einen schweren Verkehrsunfall verursacht	4	1.7 %	4.5	1.3	-
12.1	Psychische Erkrankung, selbst ²	74	32.0 %	4.1	1.8	.001
12.2	2. Psychische Erkrankung, selbst ²	13	5.6 %	4.0	1.8	.000
12.3	3. Psychische Erkrankung, selbst ²	2	0.9 %	4.0	1.4	-
13.1	Psychische Erkrankung, Nahestehender ²	95	41.1 %	3.6	1.3	.234
13.2	2. Psychische Erkrankung, Nahestehender ²	20	8.7 %	3.3	1.3	.013
13.3	3. Psychische Erkrankung, Nahestehender ²	2	0.9 %	4.0	2.8	-
14.1	Krankheit/Verletzung Freund	39	16.9 %	4.0	1.6	.199
14.2	2. Krankheit/Verletzung Freund	5	2.2 %	3.4	2.0	-
15.1	Schwere Krankheit/Verletzung, selbst	54	22.9 %	4.3	1.8	.050
15.2	2. schwere Krankheit/Verletzung, selbst	16	6.9 %	4.0	1.6	.710
15.3	3. Schwere Krankheit/Verletzung, selbst	3	1.3 %	3.3	1.2	-
16.1	Ärger mit dem Vorgesetzten	63	27.3 %	4.2	1.5	.316
16.2	2. Ärger mit dem Vorgesetzten	6	2.6 %	4.0	1.7	-
16.3	3. Ärger mit dem Vorgesetzten	2	0.9 %	3.0	1.4	-
17.1	Krise mit den Eltern	63	27.3 %	4.0	1.5	.146
17.2	2. Krise mit den Eltern	13	5.6 %	3.7	1.6	.261
17.3	Ernste Krise mit den Geschwistern	32	13.9 %	4.0	1.3	.804
17.4	Ernste Krise mit den Kindern	6	2.6 %	4.5	1.4	-
17.5	Ernste Krise mit dem Partner	46	19.9 %	3.9	1.4	.836

Notes. n_1 = sample size of the group who experienced the event
 BW M - Scores range from: (2) very negative (5-6) neutral (10) very positive 2 – 10, SD = Standard deviation
 p = Significance
² Event is formulated by the Author.

Continuance: List of reported life events (N = 227)

Nr.	Life Event	n ₁	Prozent	Appraisal (BW)		p
				M	SD	
17.6	Ernste Krise mit den Großeltern	7	3.0 %	4.4	1.4	-
17.7	Ernste Krise mit anderen Familienmitgliedern	9	3.9 %	4.8	1.2	-
18	Wechseljahre	16	6.9 %	6.1	2.0	.064
19.1	Wechsel des Wohnortes/ -Landes	151	65.4 %	7.9	2.1	.874
19.2	2. Wechsel des Wohnortes/ -Landes	74	32.0 %	8.3	2.0	.514
19.3	3. Wechsel des Wohnortes/ -Landes	32	13.9 %	8.6	2.0	.671
19.4	4. Wechsel des Wohnortes/ -Landes	3	1.3 %	9.7	0.6	-
20.1	Arbeitsplatzverlust	32	13.9 %	5.9	1.9	.120
20.2	2. Arbeitsplatzverlust	5	2.2 %	6.4	1.5	-
20.3	3. Arbeitsplatzverlust	4	1.7 %	5.7	1.7	-
21.1	Große finanzielle Sorgen	62	26.8 %	4.5	1.7	.724
21.2	2. große finanzielle Sorgen	6	2.6 %	3.8	1.9	-
21.3	3. große finanzielle Sorgen	3	1.3 %	2.0	0.0	-
22.1	Schwangerschaftsabbruch	37	16.0 %	4.7	2.0	.477
22.2	2. Schwangerschaftsabbruch	8	3.5 %	5.2	2.1	-
23.1	Kontakt zu Freunden brechen ab	134	58.0 %	4.6	1.3	.103
23.2	Kontakte zu weiteren Freunden brechen ab	29	12.6 %	4.3	1.4	.086
23.3	Kontakt zu noch weiteren Freunden brechen ab	12	5.2 %	4.2	1.5	.838
24.1	Veränderung Arbeitsrhythmus des Partners	51	22.1 %	5.6	2.1	.178
24.2	2. Veränderung Arbeitsrhythmus, Partner	5	2.2 %	5.2	1.3	-
25	Berentung oder Frühinvalidisierung	4	1.7 %	5.7	3.1	-
26.1	Pflege eines erkrankten/alten Angehörigen	29	12.6 %	5.7	2.2	.812
26.2	2. Pflege eines erkrankten/alten Angehörigen	2	0.9 %	7.0	1.4	-
26.3	3. Pflege eines erkrankten/alten Angehörigen	1	0.4 %	9.0		-
27.1	Veränderung Lebensbedingungen der Familie	38	16.5 %	6.8	2.3	.218
27.2	2. Veränderung der Lebensbedingungen, Familie	4	1.7 %	8.0	1.8	-
28	Ungünstige Wohnbedingungen	42	18.2 %	4.6	1.7	.719
29.1	Sohn/Tochter verlässt das Haus	24	10.4 %	6.2	2.0	.003
29.2	2. Tochter/Sohn verlässt das Haus	10	4.3 %	7.5	1.8	-
29.3	3. Tochter/Sohn verlässt das Haus	2	0.9 %	8.0	0.0	-
30.1	Beendigung einer Ausbildung	151	65.4 %	8.6	1.9	.432

Notes. n₁ = sample size of the group who experienced the event
 BW M - Scores range from: (2) very negative (5-6) neutral (10) very positive 2 – 10, SD = Standard deviation
 p = Significance

Continuance: List of reported life events ($N = 227$)

Nr.	Life Event	n_1	Percent	Appraisal (BW)		p
				M	SD	
30.2	Beendigung einer 2. Ausbildung	40	17.3 %	9.3	1.3	.859
30.3	Beendigung einer 3. Ausbildung	9	3.9 %	8.9	1.6	-
30.4	Beendigung einer 4. Ausbildung	1	0.4 %	8.0		-
31.1	Längere/häufige Trennung vom Partner	65	28.1 %	5.5	2.0	.201
31.2	2. längere/häufige Trennung vom Partner	8	3.5 %	5.5	1.6	-
32.1	Stärkere Schwierigkeiten mit dem Kind	16	6.9 %	4.6	1.8	.015
32.2	2. stärkere Schwierigkeiten mit dem Kind	1	0.4 %	2.0		-
33.1	Belastung durch Hausarbeit/Landwirtschaft	12	5.2 %	5.3	2.2	.109
33.2	2. Belastung durch Hausarbeit/Landwirtschaft	3	1.3 %	5.0	3.0	-
34.1	Tod eines Lieblingstiers	87	37.7 %	4.0	1.2	.441
34.2	Tod eines 2. Lieblingstiers	19	8.2 %	3.6	1.4	.661
35	Einberufung zum Grundwehrdienst	50	21.6 %	5.2	2.0	.698
36.1	Aufnahme eines/r Studiums/Ausbildung	180	77.9 %	8.5	1.8	.757
36.2	2. Aufnahme eines/r Studiums/Ausbildung	38	16.5 %	9.2	1.1	.951
36.3	3. Aufnahme eines/r Studiums/Ausbildung	12	5.2 %	9.5	1.1	.873
37.1	Ärger/Streit mit Arbeitskollegen	44	19.0 %	4.4	1.5	.649
37.2	2. Ärger/Streit mit Arbeitskollegen	9	3.9 %	4.6	1.7	-
37.3	3. Ärger/Streit mit Arbeitskollegen	2	0.9 %	4.5	2.1	-
38.1	Heirat oder Verlobung ²	64	27.7 %	8.0	2.8	.000
38.2	2. Heirat oder Verlobung ²	12	5.2 %	8.3	2.1	.009
38.3	3. Heirat oder Verlobung ²	2	0.9 %	8.0	2.8	-
39.1	Romantische/bedeutende Liebesbeziehung ¹	182	79.7 %	8.3	1.7	.440
39.2	2. romantische/bedeutende Liebesbeziehung ¹	112	48.5 %	8.0	2.0	.337
39.3	3. romantische/bedeutende Liebesbeziehung ¹	51	22.1 %	7.9	2.3	.053
39.4	4. romantische/bedeutende Liebesbeziehung ¹	17	7.4 %	8.5	2.2	.520
40.1	Untreue des Partners	67	29.0 %	3.6	1.3	.430
40.2	2. Untreue des Partners	14	6.1 %	4.4	2.2	.880
40.3	3. Untreue des Partners	3	1.3 %	3.0	1.7	-
41.1	Einweisung in ein Krankenhaus	30	13.0 %	4.0	1.4	.246
41.2	2. Einweisung in ein Krankenhaus	9	3.9 %	3.9	1.9	-
42.1	Opfer eines Einbruchs	20	8.7 %	4.6	1.4	.313

Notes.

n_1 = sample size of the group who experienced the event

BW M - Scores range from: (2) very negative (5-6) neutral (10) very positive 2 – 10, SD = Standard deviation

p = Significance

¹ Event, which was taken from the study of Catlin und Epstein (1992).

² Event is formulated by the Author.

Continuance: List of reported life events (N = 227)

Nr.	Life Event	n ₁	Percent	Appraisal (BW)		p
				M	SD	
42.2	Opfer eines 2. Einbruchs	2	0.9 %	4.0	0.0	-
42.3	Opfer eines Überfalls	11	4.8 %	4.4	1.4	.938
42.4	Opfer einer Vergewaltigung	2	0.9 %	6.0	4.2	-
42.5	Sexueller Missbrauch	11	4.8 %	3.6	1.2	.880
42.6	Opfer einer Straftat, sonstiges	3	1.3 %	2.5	0.7	-
43.1	Selbstmord/-Versuch eines Nahestehenden	35	15.2 %	3.4	1.2	.182
43.2	2. Selbstmord/.Versuch eines Nahestehenden	1	0.4 %	5.0		-
44.1	Selbstmordversuch, selbst	7	3.0 %	4.6	1.5	-
44.2	2. Selbstmordversuch, selbst	1	0.4 %	6.0		-
45.1	Große Reise od. längerer Auslandsaufenthalt ²	127	55.0 %	9.3	1.3	.587
45.2	2. große Reise od. längerer Auslandsaufenthalt ²	44	19.0%	9.7	1.2	.241
45.3	3. große Reise od. längerer Auslandsaufenthalt ²	3	1.3 %	10.0	0.0	-
46.1	Sexuelle Schwierigkeiten	41	17.7 %	4.0	1.5	.117
46.2	2. sexuelle Schwierigkeiten	4	1.7 %	3.0	0.8	-
47.1	Größere Änderung der Situation am Arbeitsplatz	50	21.6 %	5.6	2.1	.315
47.2	2. große Änderung der Situation am Arbeitsplatz	12	5.2 %	8.0	2.3	.049
47.3	3. große Änderung der Situation am Arbeitsplatz	4	1.7 %	9.5	1.0	-
48.1	Wechsel der Arbeitsstelle	85	36.8 %	8.1	1.8	.129
48.2	2. Wechsel der Arbeitsstelle	37	16.0 %	8.2	2.0	.305
48.3	3. Wechsel der Arbeitsstelle	17	7.4 %	9.4	1.1	.042
49.1	Aufgabe in gesellschaftlichen Organisationen	37	10.0%	8.8	1.3	.495
49.2	2. Aufgabe in gesellschaftlicher Organisation	7	3.0 %	9.3	1.3	-
50.1	Großer persönlicher Erfolg ¹	118	51.1%	9.5	0.9	.311
50.2	2. großer persönlicher Erfolg ¹	45	19.5 %	9.3	1.0	.092
50.3	3. großer persönlicher Erfolg ¹	15	6.5 %	9.1	1.3	.184
51.1	Großer beruflicher Erfolg ¹	67	29.0 %	9.2	1.1	.001
51.2	2. großer beruflicher Erfolg ¹	14	6.1 %	8.8	1.5	.130
51.3	3. großer beruflicher Erfolg ¹	3	1.3 %	7.7	1.5	-
52.1	Rückkehr ins Berufsleben (nach Karenz/Krankh.)	22	9.5 %	7.9	2.2	.395
52.2	2. Rückkehr ins Berufsleben	2	0.9 %	10	0.0	-
53.1	Kriegserlebnis ²	6	2.6 %	5.3	2.9	-

Notes.

n₁ = sample size of the group who experienced the event

BW M - Scores range from: (2) very negative (5-6) neutral (10) very positive 2 – 10, SD = Standard deviation

p = Significance

¹ Event, which was taken from the study of Catlin und Epstein (1992).

² Event is formulated by the Author.

Continuance: List of reported life events (N = 227)

Nr.	Life Event	n ₁	Percent	Appraisal (BW)		p
				M	SD	
53.2	2. Kriegserlebnis ²	1	0.4 %	5.0		-
54.1	Naturkatastrophe ¹	11	4.8 %	3.9	2.4	.007
54.2	2. Naturkatastrophe ¹	1	0.4 %	2.0		-
55	Andere Katastrophe ²	6	2.6 %	3.0	1.3	-
56	Bewusst werden der eigenen Homosexualität ²	14	6.1 %	6.6	2.5	.475
57	Coming-out der eigenen Homosexualität ²	14	6.1 %	7.5	2.7	.369
58.1	Drogen- oder paranormale Erfahrung ³	2	0.9 %	3.5	0.7	-
58.2	Spirituelle Erfahrung oder Selbsterfahrungen ³	5	2.2 %	9.8	0.5	-
58.3	2. spirituelle Erfahrung oder Selbsterfahrung ³	1	0.4 %	10.0		-
58.4	3. spirituelle Erfahrung oder Selbsterfahrung ³	1	0.4 %	9.0		-
58.5	Persönlichkeits- oder Identitätskrise ³	1	0.4 %	3.0		-
58.6	Sinnkrise, Orientierungslosigkeit ³	2	0.9 %	3.0	0.0	-
58.7	Schwinden/Mangel des Lebens- Enthusiasmus ³	1	0.4 %	4.0		-
59.1	Führerschein ³	1	0.4 %	10.0		-
59.2	Menstruation ³	1	0.4 %	6.0		-
59.3	Einnahme von Psychopharmaka ³	1	0.4 %	6.0		-
60.1	Eifersucht auf Ex ³	1	0.4 %	3.0		-
60.2	Untreue, selbst ³	3	1.3 %	3.0	1.0	-
60.3	Trennung von Partner (ohne Konflikt) ³	1	0.4 %	4.0		-
60.4	2. Trennung von Partner (ohne Konflikt) ³	1	0.4 %	4.0		-
60.5	Auszug der Geschwister ³	1	0.4 %	4.0		-
60.6	Adoption ³	1	0.4 %	7.0		-
60.7	Von der Mutter verlassen ³	1	0.4 %	3.0		-
60.8	Von der Stiefmutter verlassen ³	1	0.4 %	3.0		-
60.9	Heirat der Schwester ³	1	0.4 %	3.0		-
60.14	Wohnungsbrand ³	1	0.4 %	4.0		-
60.15	Schulwechsel ³	1	0.4 %	10.0		-
61	Erwünschte Partnerbeziehung – nicht erfüllt	60	26.0 %	4.3	1.6	.005
62	Qualifikation/Beförderung nicht erreicht	28	12.1 %	4.3	1.6	.824
63	Unerfüllter Kinderwunsch	19	8.2 %	4.0	1.9	.001
64	Erwartete Prämien/Zuschläge nicht erhalten	16	6.9 %	3.3	1.2	.518
65	Ausbildungsabschluss, nicht geschafft ³	6	2.6 %	4.5	0.6	-
69	Verzögerung Studium. Berufl. Ziele nicht erreicht ³	7	3.6 %	4.5	0.6	-
70	Keine Geschwister ³	1	0.4 %	2.0		-
71	Ausbleiben der großen Erleuchtung ³	1	0.4 %	2.0		-

Notes.

n₁ = sample size of the group who experienced the event

BW M - Scores range from: (2) very negative (5-6) neutral (10) very positive 2 – 10, SD = Standard deviation

p = Significance

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² Event is formulated by the Author.

³ Event, which was complemented to the list from the Participants.