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Does an emergency-reframing intervention enhance mental well-being? The mediating effect of avoidant coping.

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Abstract

This study examined the effectiveness of an emergency-reframing intervention aimed at promoting adaptive self-perceptions and strengthening mental well-being in a longitudinal randomized controlled field-experiment. The study hypothesized that the intervention would reduce avoidant coping and thereby improve well-being. A total of $N = 179$ ($M_{\text{age}} = 63.07$, $SD_{\text{age}} = 18.28$) emergency patients completed measures of avoidant coping and mental well-being two weeks post-intervention. The results did not support the proposed hypotheses. Participants in the intervention group did not report significantly lower levels of avoidant coping than those in the control group ($d = -.18$, $p = .239$). Contrary to expectations, participants in the control group reported significantly higher levels of mental well-being than those in the intervention group ($d = .32$, $p = .037$). Furthermore, the mediation analysis revealed no significant indirect effect of the intervention on mental well-being via avoidant coping ($b = -.202$, 95% Boot-CI $[-.666, .123]$).

Keywords: reframing, intervention, emergency, well-being, avoidant coping, illness

Zusammenfassung

Diese Studie untersuchte die Wirksamkeit einer Notfall-Reframing-Intervention, die darauf abzielt, adaptive Selbstwahrnehmungen zu fördern und das psychische Wohlbefinden zu stärken. Die Studie wurde als longitudinaler, randomisierter, kontrollierter Feldversuch durchgeführt. Die Studie stellte die Hypothese auf, dass die Intervention vermeidendes Coping reduziert und das Wohlbefinden verbessert. Insgesamt füllten $N = 179$ ($M_{Alter} = 63,07$, $SD_{Alter} = 18,28$) Notfallpatienten zwei Wochen nach der Intervention Fragebögen zu vermeidendem Coping und psychischem Wohlbefinden per Telefoninterview aus. Die Ergebnisse stützten die aufgestellten Hypothesen nicht. Die Teilnehmer der Interventionsgruppe zeigten kein signifikant geringeres vermeidendes Coping als diejenigen der Kontrollgruppe ($d = -0.18$, $p = 0.239$). Entgegen den Erwartungen berichteten die Teilnehmer der Kontrollgruppe über ein signifikant höheres psychisches Wohlbefinden als die der Interventionsgruppe ($d = 0.32$, $p = 0.037$). Darüber hinaus ergab die Mediationsanalyse keinen signifikanten indirekten Effekt der Intervention auf das psychische Wohlbefinden über vermeidendes Coping ($b = -0,202$, 95 % Boot-CI $[-0,666, 0,123]$).

Schlüsselwörter: Reframing, Intervention, Notfall, Wohlbefinden, vermeidungsorientiertes Coping, Krankheit

1. Introduction

“I think it would be good [...] if, after going through experiences like that, one would still be supported in some way for a short time after being discharged.”

(„Ich würde es gut finden [...], wenn man dann nach solchen Erfahrungen, wenn man entlassen wird, eine kurze Zeit irgendwie noch betreut wird.“)

-Emergency patient in an interview

Medical emergencies constitute a substantial proportion of daily hospital admissions. In 2024, Viennas central emergency departments of the *Wiener Gesundheitsverbund* documented one patient visit every two minutes, of whom 18,200 required inpatient care (Kavdirmov, 2025). Such emergency admissions are mostly caused by severe health conditions, as accidents, traumatic injuries, acute medical conditions or life-threatening illnesses. This experience of emergent hospital admissions is considered as stressful life events as they are frequently associated with substantial psychological distress and an increased risk of adverse mental health outcomes (e.g. Edmondson, 2014). But how do these changes in mental well-being develop exactly?

Research suggests that how people mentally process and make sense of a stressful event, meaning how they appraise it, shapes how they deal with it (coping). This in turn influences their psychological response (e.g. well-being). It is assumed that maladaptive coping strategies, such as withdrawal, suppression or avoidance, evoke negative psychological outcomes, as distress, depression or anxiety. On the other side, it is also known that some patients experience positive psychological change and growth (Hefferon et al., 2009).

This raises the idea of implementing preventive psychological care during or shortly after hospitalization. One approach investigated in this study is the concept of wise interventions. These are brief, scalable exercises which aim to alter interpretations of oneself or one's situation. For the purpose of this study, we developed an intervention that reframes the implications of an emergency experience as an opportunity for personal growth, a source of inner strength, and a chance for meaningful learning. To test the effect of this emergency-reframing intervention, we

conducted one randomized-controlled field-experiment amongst patients of the General Hospital of Vienna who were admitted via the emergency department. The present research tests avoidant coping as mediator between the relationship of the emergency-reframing intervention and mental well-being. In the following, I will hence lay out these constructs further.

1.1. Physical Health and Mental Well-being

Physical medical emergencies do not only affect physical health. They also carry potential for psychological burden as they can trigger mental health difficulties, and hospitalization itself may influence patients' ability to cope. Research shows that the psychological reactions to medical emergencies vary considerably across individuals. In a representative sample of the German general population, life-threatening illness was identified as the second most frequently reported traumatic experience (Pettrich et al., 2025). Although exposure to potentially traumatic events affects approximately 70% to 90% of individuals, the development of posttraumatic psychopathology remains relatively rare (Kessler et al., 2017; Oakley et al., 2021). Nevertheless, posttraumatic stress disorder (PTSD) develops in approximately 12% to 25% of survivors of acute life-threatening medical events (Edmondson, 2014), indicating that a substantial subgroup remains psychologically vulnerable.

Even without the onset of diagnosable disorders, medical emergencies can profoundly affect mental well-being, contributing to psychological distress, negative emotions, illness anxiety and depression (Amaev et al., 2025; Edmondson, 2014; Barone et al., 2022; Pilet et al., 2025). Moreover, hospitalization has been shown to negatively affect patients' coping abilities and emotional adjustment, often intensifying the symptoms of anxiety and depression (Alzahrani, 2021). Importantly, these consequences are not limited to the period of inpatient treatment but persist beyond discharge. In one experimental study, emotional distress at the time of discharge was reported by 73.1% of inpatients (Hung & Lin, 2025). Similarly, research indicates that approximately one third of patients remain at risk of emotional distress two weeks after admission to the emergency department (Shah et al., 2011). Further evidence suggests that moderate psychophysical distress persists in a significant number of patients even one month after emergency department admission (Faessler et al., 2019). Especially older patients frequently report heightened vulnerability, reduced self-confidence, and a perceived loss of autonomy following hospitalization (Hussein et al., 2024).

However, despite the hardships that come along with physical emergencies, some individuals experience positive psychological changes (Hefferon et al., 2009). Research indicates that, during cardiac recovery, patients report an enhanced appreciation of life, increased emotional well-being, and greater acceptance of mortality (Holder et al., 2015). Further, survivors of life-threatening accidents often describe the event as a major turning point, fostering increased empathy, maturity, and a renewed sense of purpose (Ogilvie et al., 2012). This evidence shows that serious health conditions that come along with medical emergencies can have heterogeneous consequences on well-being, ranging from chronic distress to meaningful growth. Extending prior research, we developed and tested an intervention approach that aims to promote positive and adaptive self-perceptions and therefore, prevent further adverse psychological outcomes. To date, no standardized approach to preventive psychological care for emergency patients in Austrian hospital settings has been established. At the same time, a patient's mindset has a decisive influence on the course of the illness, recovery, and overall health (Prabakar, 2024). This implies that targeted psychological interventions delivered in the context of emergency admissions and hospitalization hold meaningful potential to enhance patient's healing process and mental well-being state.

1.2. The Importance of Appraisal and Coping in Medical Emergencies

Why do some patients react differently to the same stressor (e.g. the same type of acute illness) as others? Why do some patients leave the hospital with a feeling of growth and accomplishment while others develop distress and fear?

The same type of stressful event can lead to different psychological outcomes for different people (Job et al., 2025). Hereby, individuals' beliefs about themselves and their abilities play a central role in shaping their behavioral and emotional responses. Research suggests that it depends on their appraisal to the stressful event and on their own beliefs about the consequences: Do the patients think that the health emergency harms them, or do they recognize potential beneficial characteristics of the situation? This study uses the theoretical framework of Lazarus' Transactional Model of Stress and Coping (Lazarus & Folkman, 1984), which explains how appraisal and coping influence psychological outcomes.

1.2.1. The Transactional Model of Stress and Coping

Coping and appraisal play a determining role for the development of the just mentioned possible psychological outcomes on medical emergencies. This person–environment transaction is emphasized in Lazarus and Folkman's original transactional theory of stress and coping (Lazarus & Folkman, 1984). According to their theory, individuals' cognitive appraisals of stressful events (e.g. acute health condition) influence the coping strategies they adopt, which in turn affect psychological outcomes (e.g. psychological distress). As soon as an individual is confronted with a stressor it evaluates the relevance of the stressful event (primary appraisal): Is this condition positive or irrelevant for my well-being, or is it harmful or even a threat? Second, the individual would reflect: Do I have the personal resources to manage what has happened to me (secondary appraisal)? Both primary and secondary appraisals influence the coping strategies individuals adopt (Biggs et al., 2017). The effectiveness of coping efforts influences psychological outcomes such as well-being, psychological distress, or successful adaptation. An illustrative example could be the following: A patient who is admitted to the emergency department after a cardiac event, primarily appraises the situation as an uncontrollable threat and doubts their ability to recover. The patient may resort to avoidant coping strategies, such as suppressing thoughts about their condition or withdrawing from social support, which in turn can impair emotional adjustment and negatively affect mental well-being in the weeks following discharge.

The just mentioned avoidance-based coping strategy is just one type of different coping styles. In their transactional model of stress and coping, Lazarus and Folkman distinguish between two broad dimensions of coping. Emotion-focused coping refers to strategies aimed at regulating the emotional response to a stressful situation, for example through avoidance or attempts to mentally distance oneself from the stressor. In contrast, problem-focused coping involves efforts directed at managing or altering the stressor itself by actively addressing the source of distress (Lazarus & Folkman, 1984; Andenæs et al. 2006).

1.2.2. Avoidant Coping and Well-Being

How effective is the habitual use of avoidance-based regulation strategies? Frequent reliance on maladaptive coping strategies, such as withdrawal, escapism or emotional suppression, are associated with increased psychological distress, whereas more adaptive strategies, including emotional expression, are linked to higher levels of positive affect (Herman-Stabl et al., 1995; Olderbak et al., 2023;

Aldwin & Revenson, 1987). Nevertheless, according to the goodness-of-fit hypothesis (Lazarus & Folkman, 1984) the effectiveness of any given coping strategy depends on its fit with the specific demands and controllability of the stressor at hand.

A large body of research indicates that chronic reliance on avoidance-based regulation strategies is associated with adverse psychological outcomes, including elevated stress, anxiety, and depressive symptoms, as well as poorer physical health, increased loneliness, feelings of inauthenticity, social disconnection, and reduced life satisfaction and overall well-being (De Castella et al., 2018; John & Gross, 2004; Bose et al., 2016; Webb et al., 2012). Interestingly, the relationship between coping and well-being appears to be bidirectional (Aldwin & Revenson, 1987; Folkman & Lazarus, 1988). The psychological state influences the choice of coping strategy, and the chosen strategy in turn influences the further psychological state. Therefore, lower levels of well-being may also increase the likelihood of engaging in avoidant coping strategies. A review of studies shows that patients with chronic heart failure, who experience poorer health-related quality of life, characterized by heightened anxiety and depressive symptoms, are more likely to rely on avoidant emotion-focused coping strategies (denial, behavioral disengagement, and self-blame) (Alanazi et al., 2023). This is also consistent with the existing tendency regarding the utilization of avoidant coping strategies in patients with life-threatening illnesses such as acute myeloid leukemia and heart failure (Amonoo et al., 2022; Bose et al., 2016). Furthermore, avoidance of medical information has been shown to be especially pronounced in the context of severe or even incurable conditions, such as Alzheimer's disease and Huntington's disease. This avoidant behavior remains substantial even in serious but treatable conditions, including HIV and cancer (Offer et al., 2025).

1.2.3. Coping as a Potential Mediator

This research examines whether avoidant coping plays a fundamental role as a mediator on the effect of the emergency-reframing intervention on mental well-being.

Literature suggests that coping processes can function as mediators between stressful events and psychological outcomes. Within the transactional framework, coping is conceptualized as a dynamic process that arises from the interaction between the individual and the environment and therefore mediates the relationship between stress and adaptation (Andenæs et al., 2006). The mediating role of coping

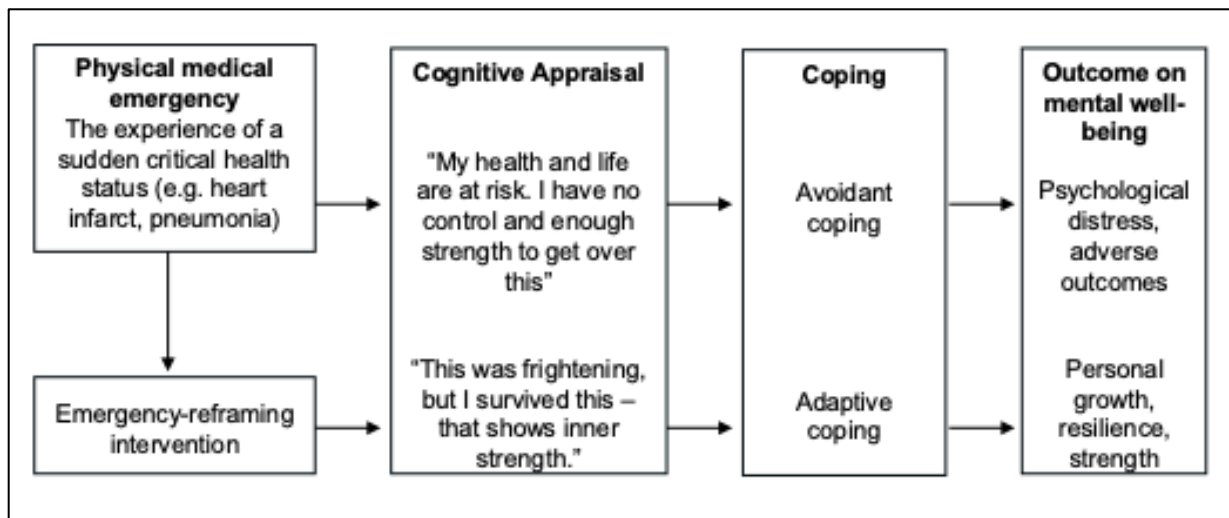
has also been supported by Folkman and Lazarus (1988), who demonstrated that coping styles such as distancing and confrontative coping were often linked to worsened emotional states, whereas planful problem solving was associated with improved emotional outcomes. Further, Obispo et al. (2023) investigated the role of coping in people with newly diagnosed advanced cancer, who experience high levels of psychological distress. They found that the intensity of distress is mitigated by the coping strategies employed, but in another direction as expected. Findings indicated that cognitive avoidance may be associated with lower levels of psychological distress and a more positive attitude in the short term, whereas anxious preoccupation was linked to increased helplessness and distress.

Together, these findings underscore the central role of coping as a mechanism through which stressful experiences are followed by variant psychological outcomes. Given this evidence, the present study theorizes that the experience of a physical medical emergency triggers a cognitive appraisal process that shapes the coping strategies patients adopt, which in turn influences their mental well-being.

The present study tests an emergency-reframing intervention amongst patients admitted to the hospital due to a medical emergency. Specifically, the underlying theoretical model (see Figure 1) implies that the emergency-reframing intervention shifts patients' appraisal of the event from a perceived threat toward a source of strength and growth, reducing adaptive coping and thereby improving mental well-being. Thus, without intervention, patients are likely to appraise the medical emergency as an uncontrollable threat, leading to avoidant coping and diminished mental well-being.

Figure 1.

Theoretical model adapted from Lazarus and Folkman's transactional theory of stress and coping (Lazarus & Folkman, 1984).



As already mentioned, the way of someone's appraisal can be modified. The present intervention draws on the concept of wise interventions, a targeted psychological approach designed to alter the way individuals interpret and make sense of their experiences.

1.3. Wise Interventions

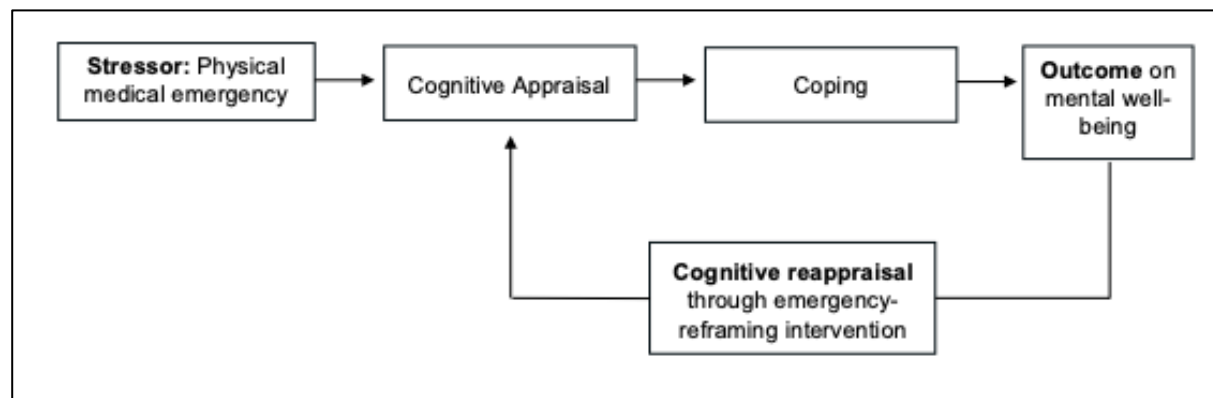
The emergency-reframing intervention developed for this study is based on the concept of wise interventions. Wise interventions are defined as brief psychological exercises designed to reframe psychologically significant interpretations of oneself or one's situation (Walton & Wilson, 2018). This type of intervention does not focus on extensive skill training or symptom reduction. Instead, it targets the subjective meanings individuals assign to themselves, others, and social situations. The term of *subjective meaning-making* refers to the processes through which individuals interpret and make sense of their experiences and social contexts (Walton & Wilson, 2018). The process in which individuals begin to question socially transmitted or maladaptive attributions and replace them with more self-affirming and adaptive perspectives is called reframing or re-appraisal. The concept of reframing goes back to the Cognitive Behavioral Therapy (CBT). In this sense, it is described as a technique that has the goal "to change, or reframe, the client's perspective from a negative into a positive" (Robson & Trautman-Jordan, 2014).

In the context of the present study, the emergency-reframing intervention targets this reappraisal process by prompting patients to re-interpret the meaning of their emergency experience. As illustrated in Figure 2, the intervention is supposed to trigger a new cycle of appraisal. This reappraisal is then leading to a new interpretation of the experience and thus a renewed choice of coping style.

It is important to note that the emergency-reframing intervention differs conceptually from reframing techniques used in broader therapeutic approaches. Therapy treatments such as the CBT typically address multiple psychological processes across an extended time. The emergency-reframing intervention though is designed as a brief (approximately 20 minutes), targeted intervention that precisely manipulates one key process, which is the cognitive appraisal of the emergency experience. This design also makes the intervention highly scalable. Its brevity and simplicity allow for direct and easy implementation across large and diverse patient populations without requiring extensive clinical resources.

Figure 2.

Cognitive reappraisal as the hypothesized mechanism of change.



Note. The terms cognitive reappraisal and reframing should be regarded as synonyms in the context of this study.

1.3.1. Mechanism, Core Components, and Techniques

Wise interventions do not aim to alter individuals' objective circumstances but rather target how individuals interpret and make sense of their situations. For example, in medical context, such an intervention would not change a patient's physical health status. Instead, it would address the subjective meaning patients assign to their illness, recovery, and personal capabilities. The mechanism through which wise interventions operate is referred to as *recursive change*. Recursive

change describes a self-reinforcing cycle in which negative interpretations (*“I am too sick to recover”*) are gradually replaced by positive and self-enhancing ones (*„I can influence my healing”*) (Walton & Wilson, 2018).

Furthermore, wise interventions are characterized by certain components that contribute to their effectiveness. They typically include illustrative narratives or quotes from individuals who have experienced similar situations and reflective writing exercises with open ended questions. A further central component is positioning participants in the role of contributors instead of the recipients. By informing participants that their reflections may be shared with others to provide guidance or support, interventions encourage individuals to view themselves as benefactors rather than beneficiaries (Walton & Cohen, 2008).

Wise interventions make use of several techniques for shifting how individuals interpret their situations (Walton & Wilson, 2018), that were also used for the present emergency-reframing intervention. *Direct labeling* explicitly assigns a positive frame to an ambiguous aspect of the self or situation, such as framing a patient as resilient and capable of growth. Another technique is prompting new meanings. It guides individuals toward alternative interpretations without imposing them directly, as explicit instruction can provoke resistance and reduce internalization. Further, the *saying-is-believing* effect is also frequently used. Drawing on cognitive dissonance theory (Festinger, 1957), individuals are introduced to a new perspective and then invited to explain it to others, often by connecting it to their own experiences. This increases internalization and fosters lasting psychological change (Higgins & Rholes, 1978). Finally, active reflection exercises encourage participants to engage with the ideas presented by reflecting on them in their own words.

1.3.2. Prior Work on Wise Interventions

Research on wise interventions is constantly expanding and demonstrates its effectiveness across diverse domains and populations.

The *Handbook of Wise Interventions* (Walton & Crum, 2020) provides an overview of diverse intervention types. For instance, the so-called happiness interventions aim to redirect attention toward positive aspects of life and reshape how individuals perceive themselves. A review of happiness interventions indicates small significant effects on depressive symptoms at post-intervention, and small effects on subjective well-being persisting up to three to six months (Layous, 2020). Another prominent example is the stress reappraisal interventions (Jamieson & Hangen,

2020), which focuses on reframing physiological stress responses as functional and adaptive. This approach is grounded in evidence suggesting that modifying appraisal processes can optimize stress responses. Empirical studies have shown that such reappraisal can improve exam performance, promote more adaptive physiological stress reactions (Jamieson et al., 2010), and reduce anxiety and maladaptive attentional patterns (Beltzer et al., 2014). In a different context, an identity-reframing intervention (Bauer et al., 2021) demonstrated that reframing refugees' stigmatized identity as an inherent source of strength and resourcefulness could enhance their academic confidence, willingness to take on challenges, and long-term educational engagement. Finally, a recent meta-analysis and systematic review by Parlak et al. (2025) provides further support for the effectiveness of wise interventions. Across studies with adolescents and young adults, the authors found small but significant reductions in depressive symptoms immediately following the intervention, as well as decreases in anxiety symptoms at a three-month follow-up.

Despite the growing body of evidence demonstrating the effectiveness of wise interventions across a variety of domains, research examining their application in medical contexts remains scarce. To date, no study has investigated a customized reframing intervention specifically designed for patients who have experienced acute medical emergencies. Research on wise interventions prove consistently that such interventions can enhance well-being through reducing anxiety and physiological stress, such as depressive symptoms. However, these studies have primarily been conducted with relatively young populations, such as students or young adults. Therefore, their effectiveness among older and medically vulnerable populations is largely unexplored. Addressing this gap is particularly important in the context of medical emergencies, as they represent major stressful life events and therefore can evoke adverse psychological outcomes or unfavorable coping responses. Given the demonstrated potential of interventions based on reframing to promote adaptive psychological adjustment, an emergency-reframing intervention may represent a promising approach to support hospitalized patients.

1.4. The Current Study

This study aims to test if the emergency-reframing intervention promotes mental well-being of emergency patients by reducing avoidant coping. The field-experiment was conducted in a natural hospital setting. A cross-sectional randomized intervention-control design was implemented, in which participants were assigned

either to the emergency-reframing intervention group or to a control condition. Outcome variables, including psychological well-being and avoidant coping, were assessed once at a two-week follow-up after the intervention. This design allows for the examination of short-term post-intervention effects while minimizing participant burden during hospitalization. I will test the following hypothesis:

First, it is hypothesized that the emergency-reframing intervention improves mental well-being in emergency patients compared to the control group. Second, it is hypothesized that the emergency-reframing intervention reduces avoidant coping in emergency patients compared to the control group. Third, it is hypothesized that avoidant coping mediates the relationship between the emergency-reframing intervention and mental well-being.

2. Method

2.1. Participants

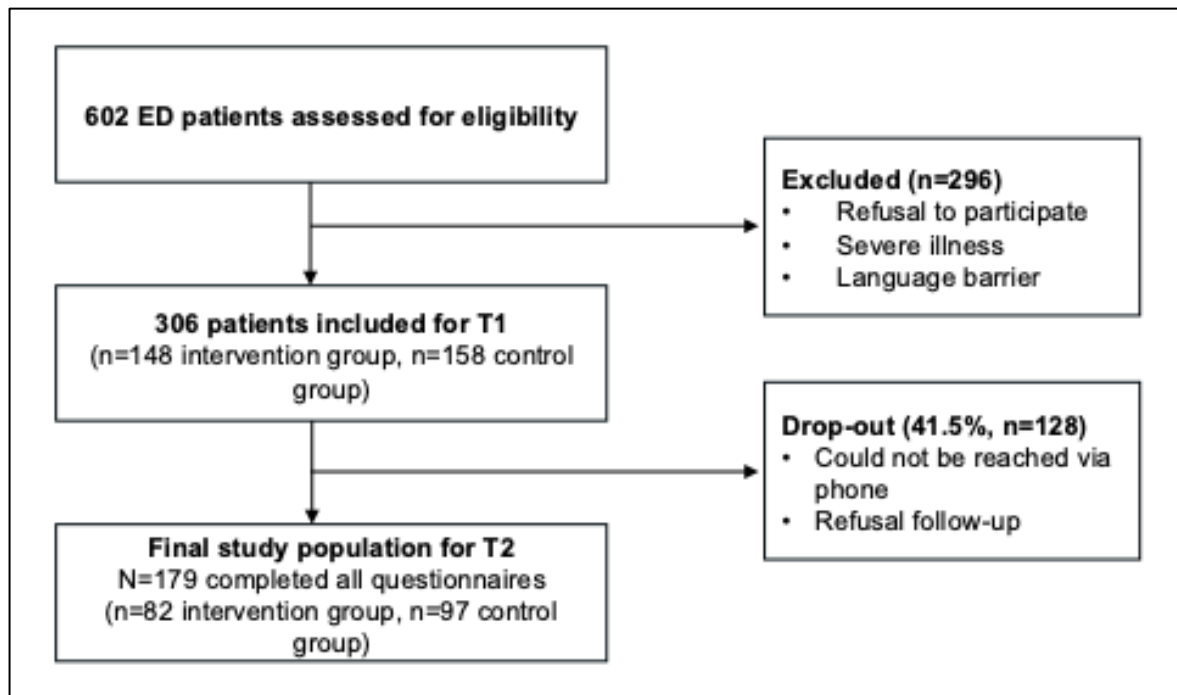
This study was part of a larger research project that was preregistered on October 3, 2025. However, the specific hypotheses and analyses reported in the present study were not preregistered. Ethical approval for the study was granted by the ethics committee on November 19, 2025.

The emergency-reframing intervention was tested among patients at the General Hospital of Vienna (Allgemeines Krankenhaus Wien, in short: AKH). Eligible participants were patients admitted via the emergency department and hospitalized for a minimum of one day. This criterion was chosen to ensure sufficient medical stabilization and perseverance of participation in the study procedures. Prior to participation, all patients were informed about the study and asked to sign a privacy policy. They were then randomly assigned to either the emergency-reframing intervention or to the control condition, which did not implement an intervention but a short questionnaire. An a priori power analysis for the main effects (independent-samples t-tests) was conducted using G*Power (Faul et al., 2007). Based on previous research on wise interventions (Parlak et al., 2025; Layous, 2020), a small-to-medium effect size of $d = 0.30$ (Cohen, 1988) was assumed. With a power of 80% and an alpha level of .05, the required sample size was $N = 278$. To account for potential dropout, the target sample size was increased by 10% to $N = 306$. Because the sample size was predetermined, an a priori power analysis was not conducted for the mediation analysis.

A total of 306 participants were initially recruited at T1 (Figure 3). Due to drop out, the final sample at T2 consisted of 179 participants included in the analyses, resulting in a dropout rate of 41.5%. Of the 179 participants at T2, 55.3% were male ($n = 99$) and 44.7% were female ($n = 80$). Participants ranged in age from 19 to 96 years ($M = 63.07$, $SD = 18.28$). 0.6% of participants reported having no formal school degree, 20.7% had completed lower secondary education (e.g., *Mittelschule*, *Sonderschule*), 26.3% reported having completed high school (e.g., *Matura*, including *Gymnasium* or *HTL*), and 24% held a university degree. 29.1% of participants reported other educational qualifications. Most participants were born in Austria 78.2%, while 21.8% were born in other countries. The most common suspected diagnoses at admission were myocardial infarction (8.4%), pneumonia (5.0%) and cardiac arrhythmia (5.0%). Participants were also asked whether they had perceived their life to be in danger during the medical emergency. 28.5% reported that they had thought their life might be in danger or that they might die, whereas 71.5% answered they had no such perceptions.

Figure 3.

Flow chart of patient selection across the two time points: intervention receipt (T1), measurement of relevant variables via phone (T2).



Note. T1 does not stand for baseline measure, as the variables used for the purpose of this study do not have baseline data.

2.2. Measures

Responses from nine items in general were used, that pertained to key constructs under investigation within the present study.

2.2.1. Mental Well-Being

Mental well-being was assessed using an adapted German version of the WHO-Five Well-Being Index (WHO-5; Topp et al., 2015). The WHO-5 consists of five items measuring subjective well-being over the past two weeks. Items were rated on a 5-point scale ranging from 1 (*not at all*) to 5 (*very*) (e.g. “*Ich habe mich fröhlich und gut gelaunt gefühlt*”). A total sum score was computed by summing all five items, resulting in possible scores ranging from 0 to 25. Higher scores indicate greater psychological well-being.

2.2.2. Avoidant Coping

Avoidant coping was measured using an adapted version of the subscale Avoid Unpleasant Situations from the Process Model of Emotion Regulation

Questionnaire (PMERQ; Heekerens et al., 2024). To ensure contextual relevance, all items were adapted to the health and medical context of hospitalization following a medical emergency. Additionally, the original 7-point response scale of the PMERQ was reduced to a 5-point scale to ensure consistency across study measures and to reduce the participant's effort. The adapted scale consists of four items assessing the tendency to avoid health-related situations. Items were rated on a 5-point scale ranging from 1 (*not at all*) to 5 (*very*) (e.g. "*Ich vermeide es, zum Arzt zu gehen, damit ich mich nicht so schlecht fühle*"). A mean score was computed across all four items, with possible scores ranging from 1 to 5. Higher scores indicate greater avoidant coping style.

2.2.3. Internal Consistency

The adapted WHO-Five Well-Being Index (WHO-5, 5 items, Topp et al., 2015) demonstrated high internal consistency, Cronbach's $\alpha = .876$. Corrected item-total correlations indicated satisfactory homogeneity across all items ($r_{it} \geq .755$) (see Table S1), suggesting that all items contributed meaningfully to the construct of mental well-being. The adapted avoidant coping subscale of the Process Model of Emotion Regulation Questionnaire (PMERQ, 4 items, Heekerens et al., 2024) showed acceptable internal consistency, Cronbach's $\alpha = .761$. Corrected item-total correlations ranged from $r_{it} = .47$ to $r_{it} = .64$ (see Table S2), indicating satisfactory homogeneity across all items. All items contributed meaningfully to the construct of avoidant coping. Item-total correlations and internal consistency were interpreted following Field (2018).

2.3. Materials

The emergency-reframing intervention was developed by Dr. Christina Bauer (University of Vienna) and is grounded in the theoretical framework of wise interventions. The intervention was specifically designed for patients hospitalized following acute medical events and aims to promote adaptive subjective meaning-making and a strength-based self-perceptions after the experience of a medical emergency (see Appendix).

2.3.1. Emergency-Reframing Exercise

The emergency-reframing intervention is characterized by the core components that were already described in the introduction:

First, the exercise was not presented as an effort to provide help to participants but rather as an opportunity for them to help others, which puts the patients in the role of contributors rather than recipients of support (Walton & Cohen, 2007). Participants were informed that their reflections would later be shared anonymously with future patients who are newly admitted and often experience anxiety.

Second, the intervention incorporated suggestive, yet open-ended self-reflective questions designed to promote strength-based interpretations. These questions subtly encourage participants to develop perceptions of resilience, gratitude, and personal growth. For example, participants were asked: *“How can it be that people learn things in such a difficult time? Do you think that people are reminded that life is precious, or what is really important in life?”* The aim of this design was to prompt participants to adopt and articulate similar interpretations in their own words.

Third, the intervention explicitly relied on the *saying-is-believing* principle. Participants were encouraged to verbally express adaptive interpretations and to phrase them in their own words during the interview. By articulating these perspectives themselves participants would actively endorse and internalize the reframed meanings.

2.3.2. Structure and Content

Prior to the reflective exercises, demographic information and perceived threat to life were assessed. Participants were asked whether they felt like their life has been in danger during the medical event.

The reflective component began with a question focused on others rather than the self. Participants were asked why some people might experience psychological distress when admitted to the hospital due to a medical emergency. This question was intended to activate reflection on the mental challenges associated with acute medical crises. Subsequently, participants were presented with illustrative quotations from other patients who had experienced similar situations. These narratives provided examples of adaptive interpretations, including recognition of bodily strength, appreciation of life's value, and identification of personal growth following crisis. One example read aloud to participants was:

“For me, this was a wake-up call. I've smoked and drunk heavily all my life, had been in pain for a long time, and never went to the doctor –

until it was almost too late. I had emergency heart surgery, and for several days it wasn't clear whether I would make it. Since then, I've been listening to my body more and going to the doctor when something doesn't feel right. I feel like I've been given a second chance at life, and I am trying to make the most of it."

Following the quotations, participants completed three reflective tasks. In line with the *saying-is-believing* principle, suggestive but open-ended questions were used to encourage participants to reproduce adaptive interpretations in their own words. For example, participants were invited to reflect on how learning experiences from hospitalization might help people in the future and whether such experiences could lead individuals to live more consciously or feel more grateful.

In the final reflective task, participants were asked how they personally could apply potential lessons learned from their hospital experience. For example, they were prompted to consider whether they might be more grateful for aspects of their lives, live more consciously, or pay closer attention to their physical health. This final reflection aimed to facilitate the internalization of the core message and to support the application of adaptive meaning-making to participants' own experiences. At the end of the interview, participants were asked whether they would consent to being contacted again two weeks later via telephone to complete follow-up assessments.

2.3.3. Development of the Intervention and Active Control Group

The development of the emergency-reframing intervention is based on prior pilot work, which was conducted to iteratively adapt and progressively develop the structure and content.

Participants in the active control group received a similar format as the intervention group, minus reframing components, suggestive questioning, and the citations of other patients. Instead, participants of the control group received general information about the hospital and completed three open-ended questions regarding their current hospital experience (e.g. *"How are you doing at the hospital right now – physically, but also mentally?"*). Nevertheless, both groups had in common that they were prompted to reflect on their own emergency experience at the hospital.

2.4. Procedure

Participants were recruited from the General Hospital of Vienna during scheduled data collection visits. On each recruitment day, the research team

received a list of patients who had been admitted via the emergency department in the preceding days. After providing written informed consent, participants were randomly assigned to one of two conditions: an intervention group or a control group. Randomization was implemented by alternating between the intervention and control condition for each participant. The emergency-reframing intervention was administered in the form of a structured face-to-face interview during hospitalization at T1. The whole intervention, including the illustrative quotations from other patients, were read aloud by the interviewer. The reflective questions were answered verbally by the participants and written down by the interviewer. The control group completed a general questionnaire with three questions about their stay at the hospital. At T2, two weeks after the initial session, participants were contacted via phone and completed a follow-up assessment measuring mental well-being, avoidant coping and some other variables, which are not relevant for the initial purpose of this study. Data collection was conducted collaboratively by a trained research team consisting of additional master's students from the University of Vienna. All interviewers followed standardized procedures to ensure consistency across participants and conditions.

2.5. Data Analysis

Data analysis was conducted using IBM® SPSS® Statistics, version 31.0 (IBM Corporation, 2024). To test the first and the second hypotheses, independent-samples t-tests were conducted to examine differences between the intervention and control groups in mental well-being and avoidant coping at T2. To address the third hypothesis, a simple mediation analysis was conducted to explore the role of avoidant coping as a mediator in the relationship between the emergency-reframing intervention and mental well-being.

Prior to hypothesis testing, statistical assumptions were examined. Assumption testing using the Shapiro-Wilk test indicated that normality was violated for avoidance in both groups and for mental well-being in the control group. However, no data transformations were performed, as independent-samples t-tests are robust to deviations from normality in samples of $N \geq 30$ and the mediation analysis conducted using PROCESS relies on bootstrapping procedures (Hayes, 2018). Visual inspection of residual plots and scatterplots revealed that assumptions of linearity, and homoscedasticity of residuals were met (see Figure S1-S3). Further, differences in sample sizes between the two groups are not considered problematic, as independent-samples t-tests are generally robust to moderate violations of

assumptions. The relevant condition variance homogeneity (Bortz & Schuster, 2010), was tested using Levene's test which indicated that the assumption of homogeneity of variances was met for both avoidant coping, $p = .053$, and mental well-being, $p = .374$. No multicollinearity was evident in the dataset using criteria of Tolerance less than 0.1 and VIF greater than 5 (Field, 2018) (see Table S5).

3. Results

3.1. Descriptive Statistics and Intercorrelations

Table 1 displays the means, standard deviations, and intercorrelations among all study variables.

Table 1.

Means, Standard Deviations and Intercorrelations of Study Variables (N = 179).

Variable	Mean	SD	Intercorrelation
			1
1. Mental Well-Being	15.04	5.01	-
2. Avoidant Coping	1.77	.86	-.240**

Note. Mental well-being: sum score (range 0–25). Avoidant coping: mean score (range 1–5). * $p < .05$. ** $p < .01$.

Response options for Mental Well-Being and Avoidant Coping (translated from german): (1) not at all (2) rather not (3) moderately (4) rather yes (5) very.

Avoidant coping was significantly negatively correlated with mental well-being, $r = -.240$, $p = .001$, suggesting that participants who reported higher levels of avoidant coping also tended to report lower mental well-being (see Table 1).

3.2. Testing of Hypotheses

3.2.1. Efficacy of the Emergency-Reframing Intervention on Avoidant Coping and Mental Well-Being

To test the efficacy of the emergency-reframing intervention on mental well-being and coping, independent-sample t-tests were conducted. Contrary to the assumption of the first hypothesis, participants who received the emergency-reframing intervention reported statistically significant lower levels of mental well-being ($M = 14.19$, $SD = 4.70$) compared to participants in the control group ($M = 15.76$, $SD = 5.18$), $t(177) = 2.056$, $p = .037$, $d = .32$. This finding does not support the first hypothesis that the intervention improves mental well-being.

Regarding avoidant coping, there was no significant difference between participants in the intervention ($M = 1.85$, $SD = .97$) and control group ($M = 1.70$, $SD = .76$), $t(177) = -1.181$, $p = .239$, $d = -.18$. This finding does not support the second hypothesis that the intervention reduces avoidant coping.

A sensitivity analysis conducted in G*Power (Faul et al., 2007) revealed that with the present sample sizes ($n_1 = 97$, $n_2 = 82$), $\alpha = .05$, and a power of .80, the minimum detectable effect size was $d = 0.374$. The observed effect size for avoidant coping ($d = -.18$) fell below this threshold, suggesting the study was marginally underpowered for this outcome.

3.2.2. The Mediating Role of Avoidant Coping

Although the intervention did not significantly influence the mediator (avoidant coping), a mediation analysis was conducted as planned. In contrast to Baron and Kenny's (1986) causal steps approach, Hayes (2017) argues that mediation can be tested even in the absence of causality and that the principal goal of such analyses is to investigate indirect effects (Preacher & Hayes, 2008; Zhao et al., 2010). Given the significant total effect of the intervention on mental well-being ($p = .018$), the mediation analysis was conducted using Hayes' (2022) PROCESS macro (version 4.2) for SPSS to explore whether avoidant coping served as an underlying mechanism explaining this effect. The mediation analysis computed 95% bias-corrected and accelerated confidence intervals of indirect effects using 5,000 bootstrapped samples. Figure 4 illustrates the results.

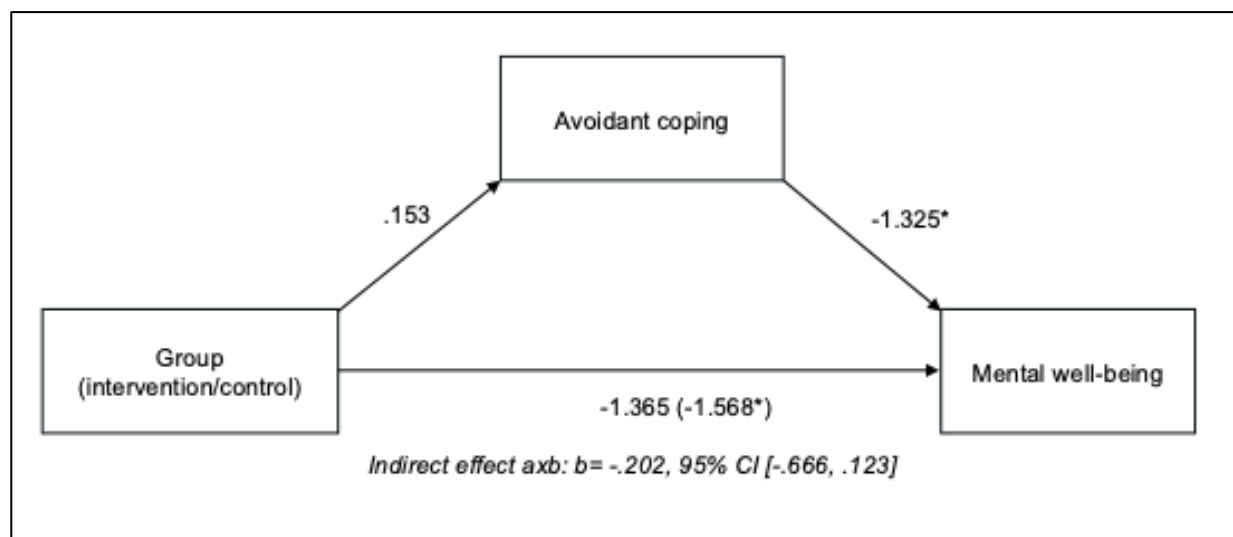
In line with the t-test (see Table S3), the total effect of the intervention on mental well-being was significant, $b = -1.568$, $SE = .745$, $t = -2.105$, $p = .037$, 95% CI $[-2.160, -.491]$, indicating that participants in the intervention group reported lower mental well-being than those in the control group. Also, in line with the t-test, path a, representing the effect of the intervention on avoidant coping, was not significant, $b = .153$, $SE = .129$, $t = 1.181$, $p = .239$, 95% CI $[-.102, .408]$, suggesting

that the intervention did not influence avoidant coping. Avoidant coping significantly predicted mental well-being scores, $b = -1.325$, $SE = .423$, $t = -3.134$, $p = .002$, 95% CI $[-2.160, -.491]$, indicating that higher levels of avoidant coping were associated with lower mental well-being. However, when avoidant coping was included as a mediator, the direct effect of the intervention on mental well-being was not significant, $b = -1.365$, $SE = .730$, $t = -1.871$, $p = .063$, 95% CI $[-2.806, .075]$. Crucially, the indirect effect of the intervention on mental well-being through avoidant coping was not significant, as the bootstrap confidence interval ranged from $-.666$ to $.123$, suggesting that avoidant coping did not serve as a significant mediator in this relationship. These findings do not support the third hypothesis that avoidant coping mediates the relationship between the emergency-reframing intervention and mental well-being.

A sensitivity analysis was conducted using G*Power (Faul et al., 2007) to determine the smallest detectable effect size with the final sample size for the planned mediation analysis. The sensitivity analysis indicated that with the final total sample size of $N = 179$, the study was able to detect small-to-medium effects ($f^2 = 0.04$) with 80% power at an alpha level of .05.

Figure 4.

Standardized regression coefficients for the relationship between group variable, avoidant coping and mental well-being ($N = 179$).



Note. Standardized regression coefficient in parentheses represents the total effect.

CI = 95% bootstrap (5,000 samples) confidence interval for the indirect effect. $*p < .05$.

To further explore the relationships between the study variables beyond the mediation model, an additional multiple linear regression analysis was conducted (see Table S5). The results indicated that avoidance was a significant negative predictor of well-being ($B = -0.26$, $SE = 0.09$, $p = .002$), suggesting that higher levels of avoidance were associated with lower levels of well-being. Additionally, to explore whether the intervention effect on mental well-being extended to a broader measure of mental health, an independent samples t-test was conducted comparing PHQ-9 scores between the intervention and control group (see Table S7). The PHQ-9 questionnaire is normally used as a diagnostic tool to screen and diagnose depression severity in adults (Kroenke et al., 2001). The Levene's test indicated homogeneity of variances, $F(1, 177) = .774$, $p = .380$, so equal variances were assumed. The PHQ-9 was administered on an adapted 5-point scale (1–5) instead of the original 4-point scale (0–3). Scores were therefore used as a relative measure of psychological distress for comparative purposes only and should not be interpreted with the established clinical cut-off values. The results revealed no significant difference in PHQ-9 scores between the control group ($M = 19.59$, $SD = 6.20$) and the intervention group ($M = 20.27$, $SD = 7.09$), $t(177) = -.685$, $p = .494$, $d = -.103$. The small and non-significant effect size further confirms the absence of a meaningful group difference.

4. Discussion

Physical emergencies, such as serious illness or accidents, represent acute stressful life events and are therefore associated with several adverse psychological outcomes as anxiety, psychological distress and even PTSD (Pettrich et al., 2025; Amaev et al., 2025; Edmondson, 2014). These experiences can profoundly shape the way patients think about and make sense of their situation, potentially giving rise to maladaptive appraisals and coping strategies that further impair psychological recovery.

To address this, we developed a brief (~20 min) emergency-reframing intervention, designed to shift the subjective meaning patients assign to their emergency experience. Rather than perceiving the event as a threat, participants were encouraged to see themselves as strong survivors, capable of personal growth and recognizing meaningful insights from a challenging life experience.

4.1. Summary of Main Findings

The aim of this study was to investigate if the emergency-reframing intervention promotes mental well-being of emergency patients by reducing avoidant coping. The results did not support the proposed hypotheses. Participants of the intervention group did not report higher mental well-being scores as participants of the control group (H1). Furthermore, participants of the intervention group did not report significantly lower scores in avoidant coping than participants of the control group (H2). Lastly, the mediation analysis did not confirm a mediating effect of avoidant coping on the relationship between the intervention and mental well-being (H3).

4.2. Intervention's Effect on Mental Well-Being

Contrary to the first hypothesis, participants in the control group reported higher levels of mental well-being than those in the intervention group with a small effect size. One explanation may lie in the timing of the intervention. Administered shortly after emergency admission (one to three days), the intervention may have reached patients at a point of acute vulnerability, when they were not yet emotionally ready to engage with a strength-based reframing of their experience. Given the intervention's suggestive nature to think positively about their situation, it could seem as though the intervention is downplaying the seriousness behind it. This and actively engaging with and reflecting on one's health situation during a medical emergency could have led to reactance or a boomerang effect (*psychological reactance theory*; Brehm, 1966). Especially participants who held strongly negative or resistant attitudes toward the strength-based and positive reframing of their health situation may have perceived the intervention content as threatening, thereby reducing their openness to and engagement with the reframing process. This interpretation is consistent with the assimilation-contrast theory (Sherif et al., 1958). This theory suggests that the introduction of an anchor, here the reframing of the emergency experience, can shift subjective interpretation either toward or away from a reference point depending on the perceived distance between the anchor and one's current state. For patients experiencing acute distress, the reframing stimulus may have contrasted with their felt experience, resulting in a more negative rather than more positive appraisal of their well-being.

4.3. The Mediating Effect of Avoidant Coping

Avoidant coping did not function as a mediator in the relationship between the emergency-reframing intervention and mental well-being, as there was no positive main effect of the intervention on mental well-being.

The theoretical model of this study (see Figure 1) proposed that the emergency-reframing intervention would shift patients' appraisal of their experience, thereby reducing avoidant coping. The effect of the intervention on avoidant coping (a-path), however, was not significant. The intervention may not have targeted the right mechanism: Rather than directly addressing avoidant coping, it focused on resource activation and cognitive reframing of the emergency experience. Simply confronting patients with their health situation may have been insufficient to reduce avoidant coping.

Moreover, the relatively low levels of avoidant coping observed in the present sample suggest a possible floor effect, limiting the range of variability available to detect meaningful intervention-induced change.

Nevertheless, analyses revealed a consistent negative association between avoidant coping and mental well-being across correlational, regression, and mediation analyses, indicating that higher levels of avoidant coping were associated with lower mental well-being independent of group membership (b-path). This finding aligns with a substantial body of literature demonstrating that avoidant and suppression-based coping strategies are linked to poorer psychological outcomes in both general and clinical contexts (Herman-Stabl et al., 1995; Aldwin & Revenson, 1987; Olderbak et al., 2023; De Castella et al., 2018; John & Gross, 2004; Bose et al., 2016; Webb et al., 2012). Notably, this relationship held even in a sample characterized by relatively low overall levels of avoidant coping, suggesting that even modest tendencies toward health-related avoidance may carry meaningful consequences for subjective well-being in this population.

4.4. Limitations and Future Research

Besides the valuable theoretical and empirical insights, several limitations should be noted.

4.4.1. Methodological Limitations

First, given the cross-sectional design, the directionality of the observed relationships within the mediation model cannot be determined. Therefore, since

avoidant coping and mental well-being were assessed only once and simultaneously at the two-week follow-up, it is not possible to verify the assumed causal order of the mediation model. Specifically, it cannot be determined whether avoidant coping preceded and influenced mental well-being as hypothesized, or whether the association between the two variables reflects a reverse causal direction (Baron & Kenny, 1986). Furthermore, both variables may have been simultaneously influenced by unmeasured third variables, such as the severity of the medical condition. Future research on mediating effects should therefore consider longitudinal designs with at least one baseline measure of the mediator before the intervention.

Moreover, internal validity may be affected by limited control over potential confounding variables, such as current mood, recall bias, social desirability, or environmental distractions during hospitalization. Also as explained at the beginning, mental well-being may be partially confounded with patients' physical well-being, given the bidirectional relationship between psychological and physical functioning. Because participants were hospitalized following serious medical emergencies, changes in their physical condition over the two-week follow-up period may have substantially influenced reported mental well-being. Finally, as the study was conducted within a single hospital setting, generalizability of the findings to other clinical contexts or patient populations may be restricted (external validity).

Regarding the quality of variable assessment, we used self-report instruments, which can evoke response biases, such as social desirability or recall errors.

4.4.2. Study Population

The sample of hospitalized emergency patients was, on average, relatively older, which posed specific methodological challenges. Age-related factors such as potential hearing impairments, difficulties in comprehension, or lower openness toward psychological topics may have influenced participants' engagement with the intervention and assessment procedures. Also, the follow-up assessment conducted via telephone presented practical limitations. Reaching all participants proved difficult, and the absence of visual response formats may have affected comprehension of the Likert scales, potentially introducing measurement error. This procedure also contributed to the high drop-out rate of 41.5%.

As already mentioned, the sample shows relatively low levels of avoidant coping on average. These scores were assessed approximately two weeks after hospital admission, at a point when the acute health crisis had already passed.

Therefore, there was no measurement of avoidant coping at the moment of peak acuity, when avoidance tendencies may have been most pronounced. The hospital context itself may further have suppressed avoidant responses, as patients were already confronted with their health situation. An additional earlier assessment would have offered a baseline measure and strengthened causal inference regarding the intervention's effect on avoidant coping.

4.4.3. Measures of Avoidant Coping

The adapted scale to measure avoidant coping demonstrated only acceptable internal consistency (Cronbach's $\alpha = .761$), which may have attenuated the observed relationships involving this variable and limited the precision with which avoidant coping was captured. Beyond measurement quality, the timing of assessment may have further contributed to the low variability observed in avoidant coping scores (floor effect). An assessment conducted shortly after the emergency event, prior to the intervention, could capture avoidant coping at its highest and provided a meaningful baseline.

Future research should consider extending the measurement of avoidant coping by examining the full range of coping strategies. This would provide more specific insights into the present coping behavior of the sample. Do control group participants rely more on maladaptive coping strategies, while intervention group participants adopt more adaptive ones?

The present study found that higher levels of avoidant coping were associated with lower mental well-being. But still, it remains an open question whether adaptive strategies such as problem-focused coping are conversely associated with higher levels of mental well-being among emergency patients.

4.4.4. Implementation of the Intervention and Assessments

A further set of limitations concerns the practical implementation of the intervention. Could there have been a better timing to implement the intervention, disregarding the capacities of the research team? As already laid out, administering the intervention shortly after emergency admission meant that some patients may have been too acutely distressed to engage openly and constructively with the reframing content, potentially undermining its effectiveness (see assimilation-contrast theory). Future studies should consider implementing the intervention at a later point

during or after hospitalization, once patients have had sufficient time to stabilize emotionally.

Additionally, the overall duration of both study conditions may have influenced the patient's engagement and the endurance during their participation. Both in the control group and the intervention group, the interviews were followed by assessments of other variables. Especially the administration of the intervention condition lasted between 20 and 30 minutes, which may have contributed to the comparatively higher dropout rates observed in the intervention group. Furthermore, the assessment via telephone two weeks post intervention also required an amount of time that many participants were not willing to take. Besides other aspects, this might explain the high drop-out rate at T2.

4.4.5. Thoughts on Future Study Designs

The limitations outlined above raise the question of how future studies could optimize the design of emergency-reframing interventions to minimize the sources of bias and confounding identified in the present study. Drawing on recently conducted wise intervention studies (Bauer et al., 2021; Bauer et al., 2025), one promising approach would be to invite patients with a recent emergency experience to participate a few weeks after hospital discharge. Conducting the intervention at this later timepoint would allow patients to engage with the reframing content from a position of greater emotional stability, reducing the risk that acute distress interferes with openness to the intervention. Furthermore, future studies should consider requiring participants to complete the intervention in written form (e.g. Bauer et al., 2025), rather than administering it verbally through an interviewer. The latter format is more susceptible to error and therefore not as reliable. Participants may mishear or misinterpret content, require additional time to process spoken information, and may feel pressured to respond immediately without sufficient reflection. Moreover, research consistently demonstrates that people behave and respond differently when they are being observed (Zajonc, 1965) or when they perceive or even fear being evaluated by others (Cottrell et al., 1968). This undermines the validity of verbally administered interview assessments.

Regarding the telephone assessments, to reduce the sources of bias, outcome measures at T2 could be administered via an online survey, again in line with the approach used by Bauer et al. (2025). This would minimize interviewer

effects, reduce social desirability bias, and allow participants to complete the assessment at their own pace and in a comfortable environment.

4.5. Conclusion

The present study investigated the effect of a brief emergency-reframing intervention on mental well-being and avoidant coping in hospitalized emergency patients. The results offer important implications for both future research and the practical application of psychological interventions in emergency care settings.

First, this investigation found that the timing of the intervention could be crucial: Premature confrontation with a distressing health experience may carry emotional costs rather than benefits. Future interventions may therefore be more effective when delivered toward the end of the hospital stay or in the context of post-discharge rehabilitation.

Second, the present findings suggest that coping needs to be examined in greater depth to fully understand the relationship between intervention, coping, and mental well-being. The study revealed that avoidant coping alone may not capture the complexity of how emergency patients respond to their experience. Future research should therefore assess a broader range of coping strategies in emergency patients. At the same time, interventions should be more precisely tailored to target and improve adaptive coping.

Finally, the application of wise interventions in other populations and settings has proven to be very beneficial (Bauer et al., 2021; Bauer et al., 2025; Parlak et al. 2025; Walton & Crum, 2020). Thus, the broader potential of psychologically “wise” interventions across diverse populations justifies further investigation of emergency-reframing approaches. The quote at the outset of this work recalls the following thought: Patients facing a major health crisis wish for psychological support that helps them return to daily life – perhaps not with a fully recovered body, but with a strengthened and resilient mind.

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6. Appendices

6.1. Index of Tables

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6.3. Supplementary Tables

Table S1.

Test statistics for the German version of the WHO-Five Well-Being Index.

„Wenn Sie an die letzten zwei Wochen denken: Wie sehr stimmen folgende Aussagen?“				
„When you think back over the past two weeks, how much do the following statements apply to you?“				
Nr	Item	M	SD	r_{it}
1	Ich habe mich fröhlich und gut gelaunt gefühlt. <i>I felt happy and in a good mood.</i>	3.27	1.20	.74
2	Ich habe mich ruhig und entspannt gefühlt. <i>I felt calm and relaxed.</i>	3.22	1.27	.75
3	Ich habe mich aktiv und voller Energie gefühlt. <i>I felt energetic and full of life.</i>	2.47	1.20	.76
4	Ich bin frisch und ausgeruht aufgewacht. <i>I woke up feeling refreshed and well-rested.</i>	3.03	1.23	.65
5	Mein Alltag war voller Dinge, die mich interessieren. <i>My daily life was filled with things that interested me.</i>	3.06	1.23	.65

Table S2.

Test statistics for the modified version of the scale “Avoid Unpleasant Situations” of the PMERQ – adapted to health context.

Nr	Item	<i>M</i>	<i>SD</i>	<i>r_{it}</i>
1	Ich vermeide es, zum Arzt zu gehen, damit ich mich nicht so schlecht fühle. <i>I avoid going to the doctor so I don't feel so bad.</i>	1.60	1.05	.57
2	Ich vermeide es, über meinen Gesundheitszustand zu sprechen, damit ich mich nicht so schlecht fühle. <i>I avoid talking about my health so I don't feel so bad.</i>	2.06	1.30	.64
3	Ich vermeide es, mit Ärzten über meinen Gesundheitszustand zu sprechen. <i>I avoid talking to doctors about my health.</i>	1.39	.93	.59
4	Ich vermeide es, über meinen Gesundheitszustand nachzudenken, damit ich mich nicht so schlecht fühle. <i>I avoid thinking about my health so I don't feel so bad.</i>	2.03	1.21	.47

Table S3.

Independent-sample t-tests comparing mental well-being between intervention and control group.

Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>t</i> (177)	<i>p</i>	95% CI [LL, UL]	<i>d</i>
Intervention	82	14.20	4.70	.53	2.12	.018	[0.01, 3.04]	.32
Control	97	15.76	5.18	.52				

Note. The table summarizes an independent-samples t-test comparing Mental Well-Being (WHO-5; Topp et al., 2015) scores between intervention and control group. Levene's test indicated equal variances, $F(1, 177) = .723$, $p = .396$.

Table S4.

Independent-sample t-tests comparing avoidant coping between intervention and control group.

Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>t</i> (177)	<i>p</i>	95% CI [LL, UL]	<i>d</i>
Intervention	82	1.85	.97	.11	-1.18	.120	[-0.41, 0.10]	-.18
Control	97	1.70	.76	.08				

Note. The table summarizes an independent-samples t-test comparing Avoidant Coping (PMERQ; Heekerens et al., 2024) scores between intervention and control group. Levene's test indicated equal variances, $F(1, 177) = 3.785$, $p = .053$.

Table S5.

Multiple regression analysis predicting mental well-being from avoidant coping and group membership.

Predictor	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>	Tolerance	VIF
Avoidant coping	-1.34	.42	-.228	-3.13	.002	.992	1.01
Group	-1.37	.73	-.136	-1.82	.063	.992	1.01

Note. Model summary | $R = .276$ | $R^2 = .076$ | $F(2, 176) = 7.235$, $p < .001$ |

Dependent variable: WHO-Five Well-Being Index (WHO-5; Topp et al., 2015).

Tolerance $> .10$ and VIF < 5 indicate no multicollinearity. $p < .05$.

Table S6.

Mediation analysis predicting mental well-being from group membership via avoidant coping.

Path	<i>Effect</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>
$X \rightarrow M$ (a)	1.53	.129	1.181	.239	[-.10, .41]
$M \rightarrow Y$ (b)	-1.32	.423	-3.134	.002	[-2.16, -.49]
$X \rightarrow Y$ (c)	-1.568	.745	-2.105	.037	[-3.04, -.10]
$X \rightarrow Y$ (c')	-1.365	.730	-1.871	.063	[-2.806, .075]
Indirect (axb)	-.202	.20	-	-	[-.67, .12]

Note. Model summary | $R = .276$ | $R^2 = .076$ | $F(2, 176) = 7.235$, $p = .001$ |

X = group (0 = control, 1 = intervention); M = avoidant coping; Y = mental well-being.

Bootstrapped 95 % CIs are based on 5,000 resamples. Non-significant indirect effect indicates no mediation. $p < .05$.

Table S7.

Independent-sample t-tests comparing avoidant coping between intervention and control group.

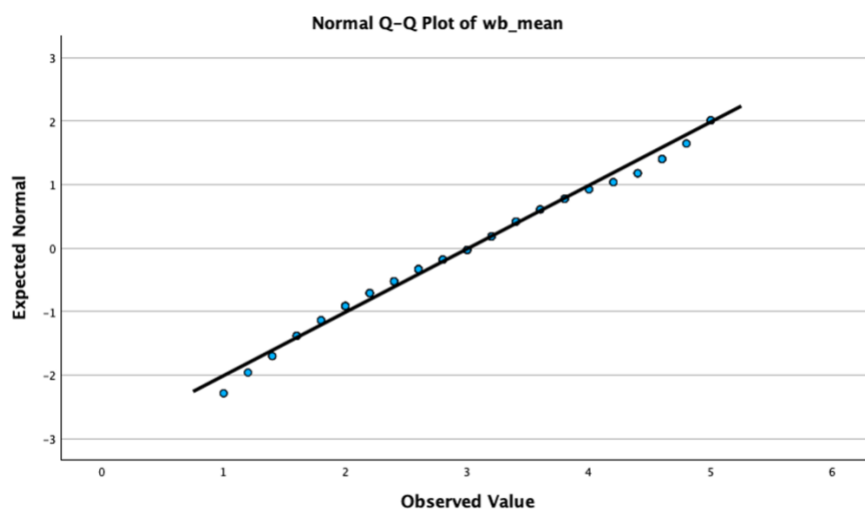
Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>t</i> (177)	<i>p</i>	95% CI [LL, UL]	<i>d</i>
Intervention	82	20.27	6.19	.63	-.685	.247	[-2.64, 1.28]	-.103
Control	97	19.59	7.09	.78				

Note. The table summarizes an independent-samples t-test comparing PHQ-9 (Kroenke et al.,2001) scores between intervention and control group. Levene's test indicated equal variances, $F(1, 177) = .774$, $p = .380$.

6.4. Supplementary Figures

Figure S1.

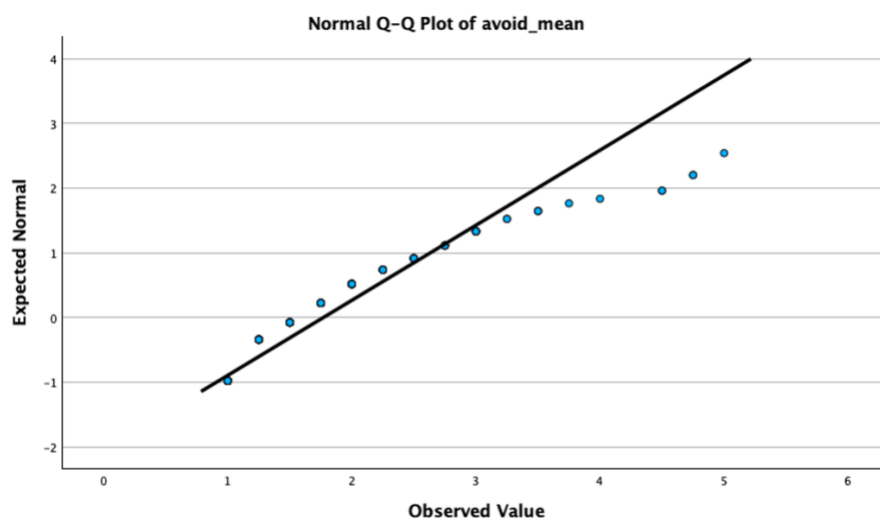
Normal Q-Q plot of Mental Well-Being.



Note. Normal Q-Q plot of total mental well-being scores ($N=179$). Data points closely follow the diagonal line, indicating an approximately normal distribution.

Figure S2.

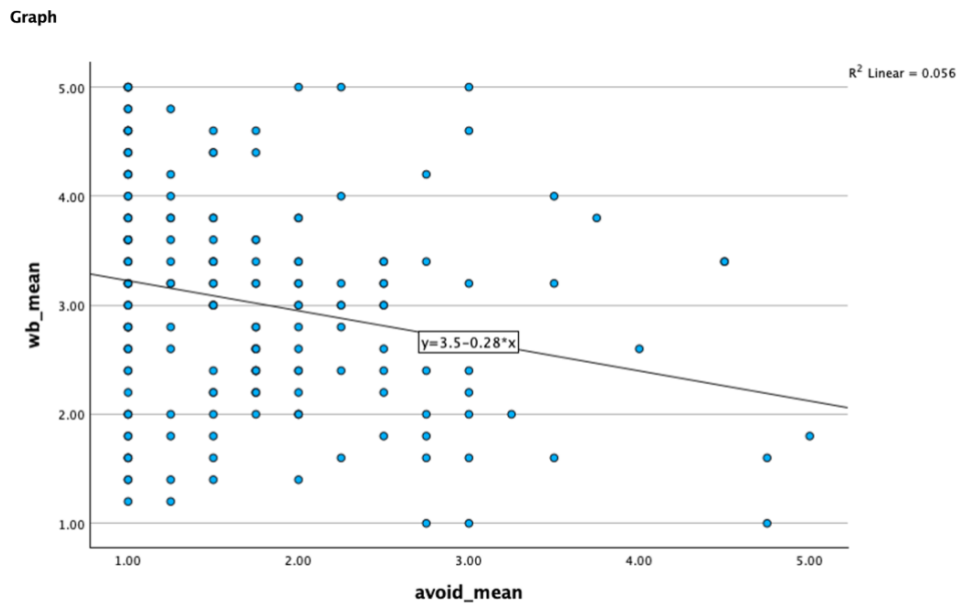
Normal Q-Q Plot of Avoidant Coping.



Note. Normal Q-Q plot of total mental well-being scores ($N=179$). Data points closely follow the diagonal line, indicating an approximately normal distribution.

Figure S3.

Scatterplot showing the linear relationship between mental well-being and avoidant coping among emergency patients at T1 (N = 179).



Note. The red line represents the fitted regression line ($R^2 = .056$), showing a negative linear association. Visual inspection indicates that the assumption of linearity for the mediation analysis was met.

6.5. Interview Guideline – Intervention Group

Begrüßung (muss nicht wörtlich so sein):

- Sind Sie Herr/ Frau... ? (klären, dass man die richtige Person hat)
- Hallo, mein Name ist...
- Wir sind von der Uni Wien und wir machen gerade ein Forschungsprojekt, in dem wir wissen wollen, wie es den Patienten hier geht
- Mit dem Wissen möchten wir auch zukünftigen Patienten helfen
- Dürfen wir Ihnen dazu ein paar Fragen stellen?

Wenn ja: → **Informed consent;**

- Kurz erklären: Damit wir Sie befragen und Ihre Daten verwenden dürfen, bräuchten wir Ihre Unterschrift.
 - Wichtig ist vor allem: Ihre Teilnahme ist freiwillig und Ihre Daten werden nur in anonymisierter Form weiter verarbeitet; Wenn Sie teilnehmen wollen, bräuchten wir am Schluss des Dokuments Ihre Unterschrift (Patient/innen können entscheiden, ob sie alles lesen wollen oder einfach unterschreiben)
- Wenn das für Sie okay ist, würde ich unser Gespräch auch aufnehmen, damit wir das,

was Sie gesagt haben, später nochmal nachschauen können; wäre das okay?

→ wenn ja, Aufnahme starten; wenn nein, ohne Aufnahme weitermachen

Und generell bitte sagen Sie Bescheid, wenn irgendetwas unklar ist oder Sie etwas nicht verstehen.

Zunächst ein paar kurze Fragen.

Wie alt sind Sie? _____ Jahre

In welchem Land wurden Sie geboren?

☐ Österreich ☐ anderes Land: _____

Was ist ihr höchster Schulabschluss?

☐ kein Schulabschluss ☐ Sonder-/Förderschule

☐ Mittelschule ☐ Matura (Gymnasium, HTL, etc.)

☐ Studienabschluss

☐ anderer Abschluss, und zwar: _____

Wie lange sind Sie schon hier im Krankenhaus? _____ Tage

Was ist passiert? Warum sind Sie ins Krankenhaus gekommen?

Haben Sie damals irgendwann gedacht, dass ihr Leben in Gefahr ist und Sie vielleicht sterben könnten? ☐ Ja ☐ Nein

Hintergrund unseres Projekts ist, dass wir Patienten, denen es psychisch nicht gut geht, helfen wollen.

Wir haben mit vielen Patienten gesprochen, die einen Notfall (also eine schwere Krankheit oder einen Unfall) hatten. Diese Patienten sagen, dass es ihnen nicht gut ging, als sie ins Krankenhaus gekommen sind. Viele hatten Angst davor, zu sterben, oder haben sich Sorgen gemacht über ihre Gesundheit. **Hier würden wir gerne Ihre**

Meinung wissen: Was glauben Sie? Warum geht es

Patienten manchmal psychisch schlecht, wenn sie ins Krankenhaus mit einem

Notfall kommen? Denken Sie, dass die Menschen vielleicht Angst oder Sorgen haben

oder dass Sie sich unsicher sind, was auf Sie zukommt?

Wenn keine Antwort, ja/nein Fragen: Denken Sie, Menschen haben Angst oder Sorgen? (ja/nein, und dann: was könnten das für Sorgen/ Ängste sein)?

Wenn Patient*innen geantwortet haben, Antwort zusammenfassen, und fragen, ob man es

so aufschreiben kann; und dann sagen: ok, gibt es sonst noch etwas, was Sie sagen wollen,

oder war das das Wichtigste?

Patienten haben uns aber auch gesagt, dass sie sich mit der Zeit besser gefühlt

haben- dass die Ängste weniger geworden sind und sie mehr positive Erfahrungen hatten. Einige haben sogar gesagt, dass sie durch den Notfall etwas

gelernt haben, was ihnen geholfen hat, ein besseres Leben zu führen. Das fanden wir interessant.

Wir möchten das besser verstehen: Was können Patienten aus dem Notfall lernen? Bevor wir Sie nach Ihrer Meinung fragen, möchten wir Ihnen noch erzählen, was andere Patienten erzählt haben.

Patienten haben gesagt:

- dass sie durch den Notfall gemerkt haben, dass ihr Körper stärker und resistenter ist als sie dachten
- dass Ihnen durch den Notfall bewusst geworden ist, dass das Leben kostbar ist
- dass sie besser auf ihren Körper hören und aufpassen
- dass sie sich besser fühlen mit dem Gedanken, dass sie – und keiner von uns - ewig leben können, weil das das Leben kostbar macht

Die Menschen haben uns gesagt, dass ihnen diese Lern-Erfahrungen geholfen haben, ihr Leben besser zu leben.

Ich habe dazu ein paar repräsentative Zitate von Patienten, die wir Ihnen gerne zeigen

wollen - wollen Sie die selbst lesen oder soll ich Sie Ihnen vorlesen?

„Ich habe gemerkt, dass mein Körper stärker ist, als ich dachte. Ich hatte einen Schlaganfall - mein Gehirn hatte also keinen Sauerstoff für einige Zeit. Und trotzdem hat mein Körper es geschafft, mich am Leben zu halten. Es ist schon beeindruckend, was ein Körper leistet, gerade auch, wenn er mit Krankheiten kämpfen muss. **Seit dem Notfall versuche ich, noch besser mit meinem Körper umzugehen**, damit er auch weiterhin viel leisten kann.“

„Für mich war das hier ein Weckruf. Ich habe mein Leben lang sehr viel

geraucht und getrunken, hatte schon länger Schmerzen und bin nie zum Arzt gegangen. Bis es fast zu spät war. Ich hatte eine Not-OP am Herzen, und es war einige Tage nicht klar, ob ich es schaffen würde. **Seitdem höre ich besser auf meinen Körper** und gehe zum Arzt, wenn sich etwas nicht gut anfühlt. **Ich habe das Gefühl, dass ich nochmal eine zweite Chance für mein Leben bekommen habe.** Und ich bemühe mich, sie zu nutzen.“
„Seit dem Notfall **lebe ich mein Leben bewusster.** Mir ist damals klar geworden, wie kostbar das Leben ist und wie schnell es vorbei sein kann. Zuerst hat mir der Gedanke, wie schnell es vorbei sein kann, Angst gemacht. Aber mittlerweile habe ich weniger Angst und kann den Gedanken besser für mich nutzen. Dass das Leben endlich ist, macht es ja auch so besonders und kostbar. Seit dem Notfall versuche ich noch mehr als vorher, **das Beste aus meinem Leben zu machen.** Ich ärgere mich nicht mehr so viel über Kleinigkeiten, mache mehr von den Dingen, die mir wichtig sind, und versuche einfach, mein Leben so gut wie möglich zu nutzen.“

Jetzt möchten wir Ihre Meinung wissen.

Zur Erinnerung: Das, was Sie uns sagen, werden wir später anonym an zukünftige Patienten weitergeben, die neu ins Krankenhaus kommen und oft viel Angst haben. Wir möchten diesen Menschen helfen.

Uns haben einige Menschen ja erzählt, dass sie durch die Notfall-Erfahrung im Krankenhaus auch Dinge gelernt haben – dass sie zum Beispiel gemerkt haben, dass ihr Körper stärker ist als sie dachten, dass das Leben kurz und kostbar ist, oder dass sie besser auf sich achten sollten.

Was glauben Sie? Warum ist das so? Wie kann es sein, dass Menschen in einer

so schwierigen Zeit Dinge lernen? Denken Sie zum Beispiel, dass man erinnert wird,

dass das Leben kostbar ist, oder was wirklich im Leben wichtig ist?

Wenn nichts kommt: ja/nein Fragen: Glauben Sie, dass man durch die Erfahrung erinnert wird, was im Leben wichtig ist? ...

Wenn Patient*innen geantwortet haben, Antwort zusammenfassen, und fragen, ob man es so aufschreiben kann; und dann sagen: ok, gibt es sonst noch etwas, was Sie sagen wollen, oder war das das Wichtigste?

Die Menschen haben auch gesagt, dass Ihnen die Lernerfahrungen geholfen haben, ein gutes Leben zu führen; dass sie mit der Zeit weniger Angst und mehr positive Erfahrungen hatten; **Was glauben Sie: warum ist das so? Wie können die Lernerfahrungen aus dem Krankenhaus Menschen in Zukunft helfen?**

Denken

Sie zum Beispiel, dass die Menschen ihr Leben bewusster leben, oder mehr dankbar

sind?

Wenn nichts kommt: ja/nein Fragen: Denken Sie, dass Menschen bewusster leben?...

Wenn Patient*innen geantwortet haben, Antwort zusammenfassen, und fragen, ob man es so aufschreiben kann; und dann sagen: ok, gibt es sonst noch etwas, was Sie sagen wollen, oder war das das Wichtigste?

Wie ist das bei Ihnen? Wie können Sie die Lernerfahrungen aus dem Krankenhaus nutzen? Könnten Sie zum Beispiel dankbarer sein für die Dinge in

Ihrem Leben, Ihr Leben auf eine gewisse Art bewusster Leben, oder mehr auf Ihren Körper achten?

evtl. Nachfragen, um zu spezifizieren (--> wofür könnte man mehr dankbar sein; was genau könnte man tun, um bewusster zu leben oder mehr auf den Körper zu achten)

Wenn Patient*innen geantwortet haben, Antwort zusammenfassen, und fragen, ob man es so aufschreiben kann; und dann sagen: ok, gibt es sonst noch etwas, was Sie sagen wollen, oder war das das Wichtigste?

6.6. Interview Guideline – Control Group

Begrüßung (muss nicht wörtlich so sein):

- Sind Sie Herr/ Frau... ? (klären, dass man die richtige Person hat)
- Hallo, mein Name ist...
- Wir sind von der Uni Wien und wir machen gerade ein Forschungsprojekt, in dem wir wissen wollen, wie es den Patienten hier geht
- Mit dem Wissen möchten wir auch zukünftigen Patienten helfen
- Dürfen wir Ihnen dazu ein paar Fragen stellen?

Wenn ja: → **Informed consent;**

- kurz erklären: damit wir Sie befragen und Ihre Daten verwenden dürfen, bräuchten wir Ihre Unterschrift
- wichtig ist vor allem: Ihre Teilnahme ist freiwillig und Ihre Daten werden nur in anonymisierter Form weiterverarbeitet; Wenn Sie teilnehmen wollen, bräuchten wir am Schluss des Dokuments Ihre Unterschrift (Patient/innen können entscheiden, ob sie alles lesen wollen oder einfach unterschreiben)

Wenn das für Sie ok ist, würde ich unser Gespräch auch aufnehmen, damit wir das, was Sie gesagt haben, später nochmal nachschauen können; ist das ok so?

→ wenn ja, Aufnahme starten; wenn nein, ohne Aufnahme weitermachen

Und generell bitte sagen Sie Bescheid, wenn irgendetwas unklar ist oder Sie etwas nicht verstehen.

Zunächst ein paar kurze Fragen.

Wie alt sind Sie? _____ Jahre

In welchem Land wurden Sie geboren?

☐ Österreich ☐ anderes Land: _____

Was ist ihr höchster Schulabschluss?

- ☐ kein Schulabschluss ☐ Sonder-/Förderschule
☐ Mittelschule ☐ Matura (Gymnasium, HTL, etc.)
☐ Studienabschluss

☐ anderer Abschluss, und zwar: _____

Wie lange sind Sie schon hier im Krankenhaus? _____ Tage

Was ist passiert? Warum sind Sie ins Krankenhaus gekommen?

Haben Sie damals irgendwann gedacht, dass ihr Leben in Gefahr ist und Sie vielleicht sterben könnten? ☐ Ja ☐ Nein

Wir haben mit vielen Patienten gesprochen, die einen Notfall hatten. Die Patienten hatten dabei ganz unterschiedliche Erfahrungen.

Wir möchten die Erfahrungen von Patienten besser verstehen und wie sie ihre Zukunft sehen. **Bevor ich Sie nach Ihrer Meinung frage, möchte ich noch ein paar Hintergrund-**

Informationen geben:

- Das AKH ist das größte Krankenhaus in Wien.
- Es ist ein Universitäts-Krankenhaus, das heißt, es arbeitet auch eng mit der Medizinischen Universität zusammen.

- Jährlich werden hier über eine halbe Million Menschen behandelt.
- Dementsprechend kommen auch die unterschiedlichsten Patienten zum AKH

Nun möchten wir Ihre Erfahrung hören.

Wie geht es Ihnen momentan im Krankenhaus - körperlich, aber auch psychisch?

Wenn Patient*innen geantwortet haben, Antwort zusammenfassen, und fragen, ob man es

so aufschreiben kann; und dann sagen: ok, gibt es sonst noch etwas, was Sie sagen wollen,

oder war das das Wichtigste?

Was hat Ihnen im Krankenhaus geholfen und was war vielleicht auch nicht so gut am Krankenhaus?

Wenn Patient*innen geantwortet haben, Antwort zusammenfassen, und fragen, ob man es

so aufschreiben kann; und dann sagen: ok, gibt es sonst noch etwas, was Sie sagen wollen,

oder war das das Wichtigste?

Was denken Sie, wie wird es Ihnen in Zukunft gehen? Wie stellen Sie sich den nächsten Monat und auch das nächste Jahr vor? Sowohl körperlich, als auch sonst.

Wenn Patient*innen geantwortet haben, Antwort zusammenfassen, und fragen, ob man es

so aufschreiben kann; und dann sagen: ok, gibt es sonst noch etwas, was Sie sagen wollen,

oder war das das Wichtigste?