Additional File 1 –RECAPT criteria

For the process of cultural adaption, we followed the RECAPT criteria of Heim et al. (2021).

Note: This is an abbreviated version. The complete RECAPT documentation for the app can be requested: a.aeschlimann@psychologie .uzh.ch or eva.heim@unil.ch

A) Set-Up

Criterion 1: Definition of the target population	
Category	**Results**
Target group	Adult Syrian bereaved refugees in Switzerland

Criterion 2: Team and roles					
Team member	**Gender**	**Disciplinary background**	**Level / experience /other relevant information**	**Cultural characteristics**	**Role**
EH	*f*	*Clinical psychologist*	*Professor (15 years after PhD)* *Ample experience leading research projects for the cultural adaptation of interventions including an IBI for Syrian refugees*	*Swiss*	*Supervisor, discussant*
CK	*f*	*Clinical psychologist*	*Professor (12 years after PhD)* *Specialized in research on bereavement and migrant mental health*	*Canadian*	*Discussant, led research project KIIU1*
AA	*f*	*Clinical psychologist*	*PhD candidate*	*Swiss / Australian*	*Project responsible: Responsible for cultural adaptation (i.e., literature review, qualitative interviews, documentation) and*

			Previous experience with qualitative research on stigma in Arabic-speaking populations (including Syrian refugees)		*evaluation (pilot-RCT), discussant, data collection and analysis for all stages*
NB	*m*	*Psychology*	*MSc student* *Received training for semi-structured interview and course for introductory training in qualitative analysis in MAXQDA*	*Swiss*	*Data collection and analysis for qualitative interviews in formative research stage (KIIE1)*
AH	*f*	*Psychology*	*MSc student* *Previous experience working in research project for the cultural adaptation of an IBI* *Received training for semi-structured interview and course for introductory training in qualitative analysis in MAXQDA*	*Albanian*	*Discussant for cultural adaptation (KIIUE 2 and KIIUE3), data collection (KIIUE2) and analysis (KIIUE2 and KIIUE3) for qualitative interviews in cultural adaptation stage*
VT	*f*	*Psychology / Civil engineering*	*MSc student* *Previous experience working in a research project developing an IBI Received training for semi-structured interview and course for introductory training in qualitative analysis in MAXQDA*	*Greek*	*Discussant for cultural adaptation (KIIUE 2 and KIIUE3), data collection (KIIUE3) and analysis (KIIUE2 and KIIUE3) for qualitative interviews in cultural adaptation stage*
SR	*f*	*Psychology*	*MSc student*	*Egyptian*	*Discussant for cultural adaptation (KIIUE 2 and KIIUE3), data collection and analysis for pilot RCT*

			Received training for semi-structured interview		
MM	*f*	*Psychology*	*MSc student* *Experience working with Asylum seekers and refugees* *Received training for semi-structured interview and course for introductory training in qualitative analysis in MAXQDA*	*Iranian & Swiss*	*Discussant for cultural adaptation (KIIUE 2 and KIIUE3, data collection and analysis for pilot RCT*
FH	*m*	*Migration Specialist / Intercultural interpreter/counsellor*	*Peer consultant for the SUI app at the SRC*	*Syrian*	*Expert advisor, discussant for cultural adaptation (KIIUE 2 and KIIUE3), recruiter and interpreter for qualitative interviews with potential users in cultural adaptation stages (KIIUE2 and KIIUE3)*
MA	*f*	*Social Work*	*Project leader for the SUI app at the SRC*	*Swiss*	*Discussant*
RS	*f*	*Psychology*	*PhD candidate (responsible for the psychosocial content of the SUI app)*	*Swiss*	*Discussant*

B) Formative research

Criterion 5: Formative research methods	
Category	**Results**
Literature review	**Prior to development of first version** Scoping review: Culturally sensitive grief interventions Desk review on different relevant topics (e.g., positive psychology & mindfulness in Arabic speaking populations, internet-based interventions for grief, psychological interventions for grief, IBIs for Arabic speaking populations, etc.)
Qualitative methods	**Prior to development of first version** KIIU1: Key informant interviews with Syrian refugees Zurich, Switzerland (N = 10)[1] ● Were conducted in English & Arabic with interpreter ● Focus on: identify common symptoms of normal or abnormal grief in refugees from Syria and to identify barriers to the acceptability of the new prolonged grief disorder. KIIE1: Key informant interviews with experts in the accompaniment of bereaved Syrian refugees Zurich, Switzerland (N = 10) ● Interpreters (n=3), psychotherapists (n=3), religious leaders (n=2), social workers (n=2) ● Focus on: Information regarding cultural concepts of distress (CCD) in connection to grief in Syrian refugees in Switzerland, with a focus on idioms of distress, metaphors, and phrases as well as the development, the possible contents, and potential structure of the planned IBI **Iterative development process after development of first version** 1) KIIUE2: Key informant interviews with potential users and experts in the accompaniment of bereaved Syrian refugees Bern & Zurich, Switzerland (N=9) ● Potential users: Adult Syrian refugees (n=6; two participants per interview, conducted in German & Arabic with interpreter), experts: (n=3; one each: Interpreter, psychotherapist, religious leader, conducted in German) ● Focus: Generating initial feedback on the first version of the intervention 2) KIIUE3: Key informant interviews with potential users and experts in the accompaniment of bereaved Syrian refugees Bern & Zurich, Switzerland (N=9) ● Potential users: Adult Syrian refugees (n=6; conducted in German & Arabic with interpreter), experts: (n=3; two interpreters and one psychotherapist, conducted in German) ● Focus: Generating feedback on the beta-version of the intervention using walk-through think aloud methodology

[1] Research was conducted by Killikelly, Ramp & Maercker (2021), who are part of the same working group. All other formative research was conducted directly by the first author (AA).

Criterion 5: Formative research methods	
Category	**Results**
Quantitative methods	*None*

Criterion 6: Target symptoms, syndromes, needs, and context				
Category		**Nr.**	**Results**	**Source**
Cultural concepts of distress				
Idioms of distress	Specific target symptoms/ Cultural symptoms	1	**Emotion-related symptoms:** sadness/depressed mood, guilt, emotional pain, lack of joy, suppression, emotional outbursts, irritability, sensitivity (easily touched, crying), anxiety, numbness, apathy, emptiness, lack of will to live, shock	KIIE1 KIIU1 Found in both KIIE1 & KIIU1
		2	**Cognitive symptoms**: preoccupation/rumination, impaired performance (academic/professional) and concentration, denial, self-blame, yearning for deceased, stuck in past/difficulties with reality now, nightmares & flashbacks, incomprehension, confusion, worry about future, comparison with others, being mentally absent	
		3	**Behavioral symptoms:** Withdrawal (not speaking much/isolation), crying, screaming/shouting, neglect of self or others, aggressive behaviour/ hostility towards others, change in appetite (more/less), lack of interests/activities, avoidance (activities linked to deceased), seeking deceased's presence (e.g., speaking to deceased), complaining/moaning, escaping pain (via alcohol, medication, religion, doctor-shopping), beating oneself/self-harm, losing self-control	
		4	**Somatic symptoms:** Sleep problems/medication, physical pain (headaches, stomach aches, back pain, leg pain), lethargy/tiredness, weight gain, restlessness, heart attack/stroke/dying	
	Verbal expressions	5	**Metaphors and phrases** ● Descriptions of coping: related to religion / fate (e.g., God's wish is to be accepted as he knows best), acceptance of life cycle (e.g., children do not die immediately after their parents, life goes on), community related (e.g., grief is something that is carried within the community (family, neighbours) and becomes less because it is distributed amongst everyone), self-efficacy (e.g., one is able to build one's own future)	KIIE1

Criterion 6: Target symptoms, syndromes, needs, and context				
Category		**Nr.**	**Results**	**Source**
			● Descriptions of grief: Bodily (pain e.g., like fire; heart e.g., their death burnt my heart, I lost my heart; eyes e.g., I have no more tears), missing deceased individually but also secondary loss of "role" in community (e.g., family is like a belly button, if there is a loss it is as if the belly button were open and the community is out of balance), heaviness (e.g., not even the mountains could carry my loss; grief is like a backpack)	
		6	**Other verbal expressions:** Speaking about deceased/death is considered normal and done often in the Syrian community (e.g., about positive memories of deceased), preference speaking about physical pain (rather than psychological distress), religious expressions are part of everyday language	
Cultural explanations		7	**Explanation of loss:** ● Fatalistic explanations related to religion/fate (e.g., God decided, the loss is a test by God, my fate is written by God, God is punishing me), related to political situation/war (there are clear actors who are to blame for the loss), loss as a natural part of life ● Importance of explanation in treatment (due to different symptoms associated depending on explanation)	KIIE1
		8	**Explanations related to grief:** Grief and the community: A loss creates an imbalance, the community is important in getting over a loss (it is something that requires the community)	
Community needs, stigma, and context				
Specific needs and other relevant contextual information		9	**Refugee experience** ● Pre- & peri-migrational stressors: Many traumatic experiences before or during the migration journey, e.g., people drowning or going missing on the migrational journey, transgenerational impact ● Post-migrational stressors: Integration-related stressors (language learning, school, finding work, accreditation of diploma, many appointments, integration), social isolation, cultural differences (behavioural & fears) and missing home, discrimination in Switzerland, stressors connected to the asylum situation (threat of deportation, mobility restrictions, financial difficulties, no work permit, living in asylum center, waiting), stressors connected to the ongoing conflict in Syria (people going missing because of the war, being far from graves, family there, guilt, worry, political pressure, financial difficulties). ● Other: Data privacy concerns/general distrust, feelings of powerlessness/helplessness	KIIE1

Criterion 6: Target symptoms, syndromes, needs, and context			
Category	**Nr.**	**Results**	**Source**
	10	**Heterogeneity:** ● About heterogeneity: Syria is a mosaic country, people much the same but there are still differences, unclear if differences so big, need for openness in app, difficulty of accommodating everyone ● Factors of heterogeneity: Religion (e.g., Muslim - Shiites, Sunnites, Alawiites, Christian - Catholics & Protestants, Aramean Marronite, Jewish, Druze), ethnicity (e.g., Arabs, Kurds, Armenian), individual differences between people (no right grieving, different needs), language/dialect, gender, age, civil status, from countryside/city, education/profession, type of loss (son, husband, ambiguous), political	
	11	**Norms (Gender norms, other norms):** ● Other: Time-related norms (burial should happen in the first 24 hours after the death; Christians have a church mass on the day of the death, 40 days, 6 months and one year after the death; for Muslims after the death there is a memorial service lasting for two to three days, after these three days grief should be finished and the bereaved should continue with life; grief can carry on for 3 days, 40 days, for a year and some grief for their whole life; some bereaved do not visit any festivities for the first year after the loss.), behavioural norms (bereaved should wear black after the loss; Muslims should read the Quran after being bereaved; social network should visiting bereaved, express condolences and call), demographic influence on grieving norms (subcultural background influence norms and rituals; expression of grief influenced by gender, religion, cultural background and socialization which might differ from own grief reactions; social and religious norms influenced by social status, education and hometown; important to consider religious norms and rituals in the IBI regarding duration, grief expression, relationship to deceased and continuing bonds), not consider norms (was also mentioned because many grieving norms do not exist anymore) ● Gender norms: Showing grief and emotion (differing opinion: women show more intense and emotional grief reactions than men and thereby cope with the grief through these reactions, while men rather show avoidance behaviours and not show their grief openly; normal for men to cry, especially shortly after the bereavement; Syrians talk a lot about death, but women tend to talk more about grief and death; despite the showing of, losses hurt men and women equally and make them equally emotional), thematize or not (differing opinions: gender norms should be thematized in the IBI, especially also for giving space to the users' needs and potentially question existing norms; gender norms should not be thematized in the IBI), roles and rituals (gender influences grieving norms, gender norms with influence on behaviour and problems after bereavement: men should work and women should take care of family; consider gender-specific roles during	

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Category	**Nr.**	**Results**	**Source**
		grieving and connected rituals, e.g., rituals where only women meet amongst each other to talk, grieve, cry, etc.), isolation (women tend to be more isolated after bereavement due to religious and cultural norms, which can have an influence on the grief), taking advice (men in Syria tend to have difficulties with taking advice, which could have an influence on their grieving process especially considering PGD)	
	12	**Rituals:** ● Rituals connected to the burial, memorial service and the grave: financial difficulties (can arise for some families in connection to these rituals); grave is often not accessible for Syrian refugees in Switzerland, possible alternative could be a self-made altar with a photo, importance of a substitution of the tombstone, which is often in Syria; importance of burying the deceased at the right place (e.g. Islamic graveyard or next to the family) and the suffering if this is not possible (unsure if this problem should be thematized in the IBI but mentions that it is possible to buy a space on the Islamic graveyard in the city of Zurich); rituals connected to the grave (visit grave, bring flowers, light candles, pray together at grave, talk and cry together at grave) and funeral (telling stories about the deceased, coming together in the days after the death for grieving, crying and eating) ● Prayers and behavioural rituals: Prayers should be thematized as an important ritual in the IBI; Syrians wear black as symbol for their grief and often do not do activities anymore they connect with the deceased, such as visiting specific places or eating specific foods ● Rituals in Switzerland: Importance of performing rituals in Switzerland to feel close to the deceased, IBI should give suggestions for possible rituals (e.g., praying in nature or performing religious rituals in churches or mosques, talking or writing about grief on the graveyard or in nature and thereby focusing on positive aspects and including photos and memories), importance of finding a space for grief by including rituals in the day to day life (e.g., looking at photos regularly or crying), rituals on important dates like day of the death or the birthday of the deceased (e.g., posting a photo in black and white on Facebook) ● Differing opinions regarding inclusion or exclusion in IBI: IBI should include suggestions for different rituals to perform in Switzerland, different collective religious rituals should be mentioned, unsure if rituals should be included in the IBI, rituals and possible substitution rituals in Switzerland should not be thematized ● Demographics with an influence: Cultural background and religion have an influence on their acting out of rituals, religion can provide a frame for the performance of grieving rituals, such as the burial	

Criterion 6: Target symptoms, syndromes, needs, and context			
Category	**Nr.**	**Results**	**Source**
		● Ambiguous loss: In ambiguous loss it is often not possible to perform symbolic and classic grief rituals, the situation of ambiguous loss as well as the conflict in Syria and the connected experience complicate the performing of rituals such as the burial	
	13	**Types of losses (Ambiguous loss, other types of losses):** ● Others: Many Syrians experience multiple and traumatic/violent losses (often connected to PTSD symptoms and feelings of powerlessness), loss of children (loss of children can be very hurtful/difficult due to feeling responsible and feeling one has lost a part of oneself; should be considered as a special type of loss; the loss of a son is especially hurtful for mothers and Muslim families while in Christian families the loss of a son and a daughter is equally hurtful), loss of other family members (e.g. father, husband, son, mother, wife, daughter, uncle, aunt; loss of a husband as difficult because the wife remains as a single parent; general loss of family members connected to a loss of support and therefore to a weakened feeling; many young Syrians have lost their father due to the conflict; the loss of especially male family members, mainly husband, father or oldest sons as especially difficult, as the bereaved lose the protection of these family members in society; include suggestions for coping with such losses of family members.), loss of social network in Syria (friends and family), loss of homeland/culture (should be considered in IBI, find alternatives to still feel somewhat of a connection to the homeland or culture), loss of work/school, loss of roles/status (many male Syrian refugees in Switzerland lose their role as a family breadwinner, Syrian refugees in general lose many roles they had in Syria, which calls for a focus on positive aspects and maybe a reconstruction of some roles), material losses, thematize these losses or not (important to include different types of losses into the IBI because grief experience differs; adapt contents according to the experienced losses; IBI should be careful with thematizing losses or should not thematize circumstances of the losses, due to risk of retraumatizing users), other types of losses (loss of future life plans, death after physical illness) ● Ambiguous loss: Thematize or not (important to consider ambiguous loss, as so many Syrians went and are still missing; important to acknowledge ambiguous loss and normalize and validate connected feelings; inclusion of psychoeducation and coping suggestions; thematize ambiguous loss in questions regarding the experienced losses in the IBI; better not to thematize ambiguous loss in detail, as the IBI should not create any false hopes), prevalence and characteristics of ambiguous loss (many Syrians experienced ambiguous loss, due to many imprisonments and great number of disappearances; importance of showing, that many Syrians	

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Category	**Nr.**	**Results**	**Source**
		experience such cases and that affected Syrians are not alone; ambiguous loss is a very complicated type of loss, it is difficult to cope with it, as closure is not possible and often traditional grief rituals cannot be carried out; in the beginning of the ambiguous loss it is important to focus on hope and get active, try to find missing persons; with time, some affected persons consider the missing persons as dead; beliefs within families differ and some affected persons continue searching for missing persons for a very long time, which can lead to family conflicts; important to find a way to cope with the ambiguous loss and to carry on with life; in the IBI it is possible to give room for different beliefs and not force affected persons into closure; affected persons might feel like they have to fight for the right of a place of the missing person in their life), second type according to Pauline Boss (mental or psychological absence of a person because of preoccupation with past/loss), subgroups (people, which got arrested or lost during conflict, mostly an external perpetrator and connected to anger; people who disappear on the migration journey, often went missing on water, the family often feels more responsible for the circumstances), language regarding ambiguous loss (important to talk about "loss" and not "grief", as grieving is not possible or even forbidden for affected persons; IBI should talk about "missing persons" when talking about the missing or potentially dead individuals)	
	14	**"What matters most" (family, work and education, other):** ● <u>Work and education</u>: Work and education as an important aspect of life for Syrians (especially in Syria for men it is connected to being able to provide for the family, regarded as important for men to be able to work); work- and education-related perspective and integration as an important focus during treatment; Syrians perceive work as a possible solution for psychological problems ● <u>Family</u>: Meaning of and relationship to family (connection to the family is very close and family is very important; the wellbeing of the family is the most important priority for Syrians; often also aunts, uncles and grandparents are very close relatives; most parents have many children; besides the family also social life and the social network in general are very important for Syrians; the family is a very important support in life and also during the grieving process, grief is shared, which can reduce intensity; Syrians tend to mourn within the family; the family influences loss beliefs and coping with losses; family and children as important perspective and resource for Syrians during treatment; Syrians tend to solve most problems (e.g. sickness, relational or financial problems) within the family, as in Syria no social service or supporting organizations exist; very intimate things are sometimes preferred to be discussed outside of the family; different beliefs regarding grief	

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Category	**Nr.**	**Results**	**Source**
		and loss can sometimes lead to family conflicts), family situation in Switzerland (often very big family and many still in Syria, which is why the discussion of problems and difficulties within the family is limited; Syrians in Switzerland often feel responsible for family in Syria; contact to family often difficult or not possible; often less time for interaction within family in Switzerland), refugee experience and family (consideration of family when looking at the refugee experience, loss and connected suffering is very important; traumatic experiences on the migration journey might have an negative influence on one's family such as domestic violence or divorce; family-related problems, often of financial nature, can act as a barrier to treatment; the refugee experience can lead to transgenerational trauma), roles within family (important to be functional within the family and be there for them, this makes some bereaved Syrians show resilience but also denial of the loss; men have the role of the breadwinner and women the role of the caretaker, which can be difficult if these roles can't be fulfilled within the family; a too narrow focus on caretaking after a loss can be problematic for mothers; role of the family protector of fathers, which is very difficult for families if this protection is lost within the society) ● Others: Connection to Syrian culture (e.g., food), political ideologies, integration into Swiss society (e.g., finding an apartment)	
	15	**Religion:** ● Religiosity of Syrians: Syrians have a close relation to Religion, which is connected to a generally religious Syrian society; many Syrians are strongly religious ● Subgroups: Many different religious groups in Syrian society, with Muslims and Christians being the two main two, but having many further subgroups; substantial subcultural differences between subgroups, which also have an influence on grief; most Syrians are Muslim, but there is also a Christian minority; Muslims are more religious and have a closer relationship to God than Christians ● Religiosity and grief: Important to consider and include religious beliefs, concepts and norms regarding grief in the IBI; religion has a big influence on grief and the grieving process; many Syrians find a closer connection to religion again when experiencing a loss; many rituals and norms of grieving are closely related to religion; cultural explanations, metaphors and phrases regarding losses and grief are closely related to religion; religious contents of cultural explanations, metaphors and phrases are often also accepted by moderately or non-religious Syrians; can provide an important support in coping with grief	

Criterion 6: Target symptoms, syndromes, needs, and context			
Category	**Nr.**	**Results**	**Source**
		● Religious beliefs: Soul is connected to God and having psychological disorders is often described as having "demons" in religious contexts; in Islamic culture grief is considered as something natural, just like birth, and every type of loss should be accepted; many strongly religious Syrians believe, that losses should be accepted and grieving too much is a sign of weakened religious belief; Muslims believe in "paradise", while Christians believe in "heaven" or "eternal home", which all describe the place of life after death ● Religious counselling and religious elements as grief support: Religion as an important resource when experiencing a loss; differing opinion: religion should only be used to a certain extent as a resource; possibility of seeking help from religious leaders and counsellors for grieving Syrian refugees; churches and mosques as places, where grieving Syrians can perform rituals; religious books/texts (e.g. Koran or Bible) as a potential resource for coping with grief	
	16	**Peer support:** ● Inclusion of peer support and ways of inclusion: considered an important form of support; points of contact for social and religious counselling from persons within the Syrian community; suggestions and tips for seeking help from peers; points of contact for self-help groups as well as enabling contacts between different Syrian families for psychohygiene ● Difficulties with peer support: Heterogeneity and many different conflict parties make it difficult to include peer support, because of mistrust; fear of being stigmatized as a difficulty in peer support; peer support should not be included as it is strong shortly after the death anyways and afterwards Syrian fear being stigmatized and prefer anonymity ● Importance of peer support in grief process and lack of such support in Switzerland	
	17	**Cultural differences:** ● Difficult for experts working with Syrian refugees suffering from PGD to understand their refugee experience and the connected suffering, which can complicate communication and create distance between Syrian refugees and e.g., mental health care providers ● Western standards and concepts in therapy can be a barrier for successful therapy and even irritate Syrian refugees in the (mental) healthcare system (e.g., directness in communication)	

Criterion 6: Target symptoms, syndromes, needs, and context			
Category	**Nr.**	**Results**	**Source**
		● Interpreter dependence: Interpreters can bring a translation bias as well as a bias of their own experience into the therapy, which complicates the process and the understanding between the patient and the therapist	
Mental health related stigma	18	● Fear of speaking about/showing mental health problems (being labeled as crazy), IBI seen as a potential solution to this, though it is unclear whether stigma applies to grief ● Stigma related to help-seeking (being labeled as crazy), where the importance of explaining the use of mental health services was highlighted, because these concepts are stigmatized and not well known in Syria	KIIE1
Treatment components			
Framing	19	**Explanatory model/treatment rationale:** Underline the importance of treatment to break out of isolation of grief, find strength for integration and future perspectives, and to be there for family; transparency in explanatory model important	KIIE1
	20	**Treatment goal:** ● <u>In general</u>: Acceptance/integration of loss and new beginning including the performance of rituals; promote future perspectives and finding joy, hope and courage; resolve PGD, promote healthy lifestyle ● <u>Loss- and restoration orientation</u>: Mixture of loss- and restoration orientation by moving from loss- to restoration-orientation (find a place for/integrate loss experience and carry on with life, find a balance) and provide users with choice depending on what they would like to focus on; restoration-orientation should focus on presence and future, new beginnings/perspectives, focus on family/school/job, distraction from grief, focus on healing process; loss-orientation should focus on speaking about grief and losses to promote processing the grief and finding a space for the grief but avoid asking too specifically about the details of the loss ● <u>Relationship to the deceased</u>: Importance of positive memories and rituals to feel close to deceased, acknowledging that relationship will not end, adapt/find right place for the relationship and balance this with restoration, individuality of balance between maintaining and adapting relationship (no pressuring into adapting)	

Criterion 6: Target symptoms, syndromes, needs, and context			
Category	**Nr.**	**Results**	**Source**
Contents	21	**Interventions and exercises:** ● Psychoeducation and normalizing: Of mental health problems and utilization of mental health services in general (specifically: definition/description/prevalence of psychological problems and showing that not against religion, connection of psychological and somatic problems, influence of cognitions on psychological problems, benefits of psychological treatment and explaining how mental health services work in Switzerland); regarding grief and loss, grief reactions and connected symptoms (specifically: normalizing and acknowledging individuality in grief reactions, normalizing death and loss, psychoeducation and normalizing psychological problems in connection to the refugee experience and different symptoms e.g., unable to perform certain rituals, psychoeducation regarding ambiguous loss and possible coping strategies as well as acknowledging individuality of beliefs and reactions to ambiguous loss) ● Cognitive restructuring: Restructuring of losses and grief (e.g., of feelings of guilt, as a chance for development, as a test of God), restructuring in connection to refugee experience (e.g., underline endurance and strength of refugees, chance for new beginning as opposed to loss of self-image), IBI as tool (high dose of cognitive restructuring easily implemented) ● Resource and behavioural activation: Importance of integrating resource and behavioural activation and framing of these (e.g., focus on feasible and free or cheap activities and behaviours, underline benefits and importance of being active and resources/motivate users for behavioural activation), find resources and activities and strengthen them, possible resources/activities which could be integrated (e.g., family/children, religion/prayers, social network, “3 positive things” exercise, education/work, physical activity, nature, writing/journaling, cooking, Syrian culture as resource, relationship to the deceased as resource, remembering one’s own strength/achievements and endurance) ● Mindfulness-, relaxation- and body-related exercises: Relaxation exercises, breathing exercises, exercises against stress (because most people complain about somatic problems, can show link between psychological and somatic problems), exercises for better sleep, individual preferences of such exercises (customizable list)	KIIE1
	22	**Additional resources:** ● For behavioural activation: Contacts/websites/organizations/information regarding events for implementation of behaviours/activities, focus on free/cheap activities, information regarding churches, mosques for performance of religious rituals	

Criterion 6: Target symptoms, syndromes, needs, and context			
Category	**Nr.**	**Results**	**Source**
		● For mental health/social/other services: Points of contact for further help and treatment outside the IBI (face to face for PGD, crises), for daily stressors (social counselling, legal advice), religious points of contact (religious counsellors, churches, mosques) self-help groups with other Syrian refugees, possible points of contact in case of ambiguous loss (e.g., SRC tracing service, Syrian networks)	
	23	**Other contents:** ● Information, tips and suggestions: Testimonial stories with prototypical, suggestions of and instruction for possible rituals and performance of rituals, prayers/religious texts ● Diagnostic tools on important points about the users, their context and their grief (e.g., Questions regarding role/function of the deceased, circumstances of death, feelings and negative cognitions connected to losses and suggestions for coping with those)	
Specific elements	24	**CBT:** Grief tasks (Znoj; grieving the deceased e.g., creating a space for grieving for example with a photo and a candle; accepting the loss, relationship to the deceased), cognitive restructuring/socratic dialogue for negative beliefs (Van den Hout)	KIIE1
	25	**Other:** Gestalt therapy (expression of grief, validation of grief), Pauline Boss (theory of ambiguous loss), Kübler-Ross (stage model of grief – mentioning but also critiquing stage models of grief due to lack of openness to different grieving styles)	
Treatment delivery			
Delivery format	26	**Barriers to use and limits of delivery format:** Possibly preference of face to face interventions, data privacy concerns/lack of trust (due to refugee experience), mental health stigma and tendency to have body-related explanations (more likely to use medication), post-migrational stressors as barriers, heterogeneity within Syrian community (e.g., religion) and individuality of grief reactions difficult to accommodate, unsuitable/mismatching language, unclear communication regarding goal of app, importance of free access (due to financial limitations)	KIIE1
	27	**Advantages of use and delivery format:** IBI treatment is independent of some variables (e.g., time, location, therapist, interpreters), anonymity (limits fear of stigmatization), more control over the dose, IBI can provide special content and use smartphone as a tool (include audio-visual content, additional resources through hyperlinks, use of notifications and reminders for exercises), ideal because smartphones are used extensively in Syrian community, possibility of blended treatments	

Criterion 6: Target symptoms, syndromes, needs, and context			
Category	**Nr.**	**Results**	**Source**
	28	**Subgroup use:** Influenced by ● Openness, beliefs and experience regarding therapy: IBI especially attractive to subgroup, which is open to psychological treatment, to those who are on a waitlist for face to face therapy, to those who are non-responders for face to face therapy ● Demographics: Education-level (provide animations, videos and audio-content for analphabets/older people), age (younger people more open to use, however, PGD more prevalent in older people), gender (women might be more open to suggestions), amount of social support (people with less social support are more likely to use IBI), religiosity (strongly religious people possibly less inclined)	
	29	**Promotion of use:** Type/content of advertisements (flyers, posters, video in Arabic, fact sheet), channels (mental health experts, social and religious counselors, interpreters, GPs, asylum centers, municipalities, asylum counselors, website of different organizations e.g., Swiss info, use influencers or stakeholders for advertisement through personal recommendations, word-of-mouth recommendations)	
Surface structure and other adaptations	30	**Audio-visual content:** ● Cultural adaptation of audio-visual contents: Importance of culturally adapting videos and illustrations and providing examples of Syrian persons with which the users can identify (helps to gain trust and familiarity) and avoid certain more “Western” representations (alcohol, piercings, yoga, etc.), use a funny sketch figure which accompanies users throughout IBI (for adherence) ● Audio: Importance of including audio version of all contents for analphabets, include for explanations of interventions and exercises ● Video: Inclusion of testimonials/case examples using videos in Arabic for normalization of symptoms, including animated video (introduction) to explain function and goal of IBI would be better than just audio, include videos for different exercises and interventions (“international language”, considered better than audio and also suitable for analphabets) ● Pictures: Importance of enriching text with pictures (helps with understanding content), possibly include pictures of Quran- or Bible-verses	KIIE1

Criterion 6: Target symptoms, syndromes, needs, and context			
Category	**Nr.**	**Results**	**Source**
	31	**Language:** ● Which language: Important that content is in Arabic (most people do not speak German or have difficulties), possibly provide a version in simple language German, language should be spoken Syrian Arabic not written standard Arabic (recommendation to work with experts for Syrian dialect) to make it understandable for all groups (especially in audio contents), Kurdish version would be important so as not to exclude Kurdish Syrians ● Characteristics/tone of language: Importance of keeping the language simple and close to every-day language (not everyone in target group has a high education level), use vague and neutral language regarding religion (so as to include everyone and not offend some groups), use culturally adapted language, use non-stigmatizing language (e.g., no right or wrong grief reactions, avoid pathologizing of grief), use motivational and non-directive language (frame all exercises as suggestions and not obligations), clear and direct language (e.g., regarding grief, loss, treatment goal), use of validating, trustworthy and benevolent language ● Specific words/terms: use words “iinsania” (= human) and make transparent why it’s important to help and what the goal of the IBI is, include words “grief” and “suffering” in the title of the IBI, use the word “loss” in the title and not “grief” for inclusivity regarding different stages of grief as well as ambiguous loss, recommendation to be sensitive to language subtleties regarding grief terms, Arabic language includes some religious terms and phrases automatically (e.g., “inshallah”), include common metaphors and phrases for motivation and restoration-orientation	
	32	**Structuration of contents** ● Introduction to IBI: For adherence it is important to start with something that catches users’ attention and makes them interested (e.g., funny sketch figure which follows journey in IBI, 2-3min animated video explaining IBI functions in simple language), start with explanation that death and loss is a natural experience in the introduction of IBI, begin with demographic questions, avoid starting with setting of treatment goal right away ● Further organization of content: Possibility of modularized structure where users can decide for themselves what modules to work on depending on their needs and have exit options (and add a more strict version where structure is given for people who want this), provide a mixture between general and individual part of modules and let users chose, individualize content according to different demographics (religion, cultural subgroups, age, gender etc.), separate modules for loss- and restoration-oriented content, separation of	

Criterion 6: Target symptoms, syndromes, needs, and context			
Category	**Nr.**	**Results**	**Source**
		content for different types of losses is questionable as many Syrians have experienced multiple losses, neutrality regarding different subgroups and no separate modules	
	33	**Other surface structure adaptations:** Importance of culturally adapting the contents to the target group (e.g., to religious subgroups, stay neutral regarding religion), include positivity (e.g., in the form of smileys as feedback after an intervention), implementation of funny elements and using gamification for the design of the IBI, importance of a user-friendly design (as simple to use as possible due to diverse education level), avoid too much text, integration of hyperlinks for additional resources	
	34	**Adaptations according to context and stigma** ● General tendencies: Importance of transparency (e.g., in reasons for including content and exercises in the IBI, data privacy) for improving trust due to big mistrust in target group, the title of the IBI should not specifically say “for Syrians” due to heterogeneity in Syrians, promoting hope for improvement of symptoms important in the right dose, clear and direct framing of exercises and interventions in direction of grief ● Individuality/Generality: Important to consider how to deal with heterogeneity in grief reactions in general and heterogeneity within the target group, leave room for individuality in grief reactions and avoid directive tone regarding what is right and wrong, frame as neutrally and open as possible (regarding grief and culture) for economic reasons ● Surface structure adaptation of religious contents: Separate contents for religious subgroups (especially Muslims, Christians and Atheists), importance of staying neutral regarding religion and leave room for different religious beliefs and concepts	

C) Intervention adaptation – Bottom-up development of first version

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
Overall consider-ations						
1.1	*Community needs, stigma and context: Specific needs and other relevant contextual information: Types of losses: Ambiguous loss*	***Ambiguous Loss*** ***Not adapted:*** *Topic of ambiguous loss was not included.*	*Ambiguous loss is rather prevalent among Syrian refugees and is an important topic to tackle. However, as ambiguous loss comprises several characteristics that require different interventions or different framing of the interventions (e.g., concerning rituals), the topic of ambiguous loss was left out at the current stage of the project due to lack of time and resources. At a later stage the App will be adapted for ambiguous loss, thus offering the users to choose from either an option for ambiguous loss or one for loss due to death.*	KIIE1 Nr. 13	Moderate[2]	SRC decision: Create a parallel version for ambiguous loss in a next stage for implementation of the app.

[2] Quality of evidence was categorized as follows: strong = evidence derived from qualitative interviews and literature; moderate = evidence derived from qualitative interviews, weak = no evidence, only suggestions

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
1.2	*Cultural concepts of distress: Specific target symptoms* *and/or* *Treatment Components: Contents: Intervention and exercises*	***General decision on topics/content to be included*** ● *Psychoeducation & Normalization* ● *Dealing with symptoms* ○ *Mindfulness* ○ *Behavioral activation* ○ *Resources* ○ *Strengthen social network* ● *Cognitive Restructuring* ● *Working with grief* ○ *Exposure* ○ *Role of deceased* ○ *Rituals / altar* ○ *Continuing bonds* ● *Future perspectives /new beginning*	*Based on the one hand on content/topics directly mentioned for inclusion but also on common symptoms (e.g., behavioral activation for depressed mood, cognitive restructuring for preoccupation/rumination and self-blame & guilt, exposure for denial, reinforcing social network for withdrawal, relaxation & breathing for somatic symptoms)*	KIIE1 & KIIU1: Nr. 1-4 KIIE1: Nr. 11, Nr.12, Nr. 19, Nr. 20, Nr. 21, Nr. 22 Aeschlimann et al., 2024	Strong	
1.3	*Treatment Components: Contents: Additional resources*	***Module: External resources and addresses*** *An extra module was incorporated called "Addresses and contacts", which informs users about different mental health professionals that they may contact in the case of emergency/suicidality or crisis or if they feel that they would like to speak to someone in person. The list includes contacts for crisis intervention (specialized centers, hotlines), a link to the registry*	*Due to the limits of the delivery format (no direct personal interaction) it is important to include links to mental health services such as therapists, hotlines, crisis intervention centers, groups for bereaved individuals (provides peer support) etc. so that users have the opportunity to get professional help if they are in a crisis or*	KIIE Nr. 22, Nr. 26, Nr. 16	Moderate	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
		of psychologists and also counseling services (including religious)/organizations for bereaved individuals.	*feel that they would like to speak to a professional in person.*			
1.4	*Treatment components: Framing: Treatment Goal*	***Moving from loss- to restoration-orientation throughout the app and including a good mix of both*** *1) More LO: Psychoeducation about grief* *2) More RO: Behavioral activation and resources* *3) Mix of LO and RO: Space for grief and social relationships* *4) Mix of LO and RO: Negative thoughts and self-compassion* *5) More RO: Future and growth*	*Important to include a good mix of loss and restoration-oriented components, may possibly enhance adherence and motivation if restoration orientation early on in intervention; aim is integration and acceptance of loss as well as becoming active and creating new future perspectives with a balance between LO & RO with the LO being more focused on speaking about grief, positive memories, space for grief and the RO more focused on the now and future, new perspectives, focus on family and school (what matters most)*	KIIE1: Nr. 20	Moderate	Suggestion from EH to include more restoration-oriented topics early on in intervention.
Session 1		***Introduction, grief reaction and dealing with emotions***				
1.5	*Treatment Component: Contents: Intervention*	***Normalization and validation of grief reactions*** *«Der Verlust eines geliebten Menschen ist eine der schmerzhaftesten Erfahrungen, die man im Leben machen kann.*	*Normalization and validation of grief reactions, special emphasis on the fact that grief reactions are heterogenous, even within a family (which can lead to*	KIIE1: Nr. 21, Nr. 14, Nr. 10, Nr. 26, Nr. 34	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
	and Exercises; Psychoeducation and Normalization	*Es ist eine Erfahrung, die tiefe Spuren hinterlassen kann. Sie ist oft mit starken Gefühlen und Reaktionen verbunden.»* *«Trauer unterscheidet sich von Person zu Person und zwischen Situationen.»* *«Reaktionen auf Trauer können sehr unterschiedlich sein. Teilweise auch innerhalb derselben Familie.* *Es kann schwierig sein, wenn du das Gefühl hast, du solltest gewisse Reaktionen nicht haben. Oder wenn du denkst, dass deine Trauer nur eine bestimmte Zeit dauern sollte. Oder, dass du gleich trauern solltest wie andere Menschen.* *Aber in der Trauer gibt es keine richtigen und falschen Reaktionen. Manche Menschen trauern länger als andere. Jede Person zeigt andere Reaktionen. Das ist völlig ok und hat nichts mit Schwäche zu tun.*	*conflicts or feelings of "not grieving correctly"), also giving reassurance that grief reactions have nothing to do with weakness (to normalize and counteract stigma targeting specific stigmatizing beliefs among Syrian refugees); special emphasis on heterogenous grief reactions within a family as family is part of "what matters most" so family conflicts resulting from heterogenous grieving styles may be particularly difficult and relevant for the target group*	Hassan et al., 2015 Lechner-Meichsner & Comtesse, 2022 Gearing et al., 2012 Aeschlimann et al., 2024		

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
		Trauer ist eine normale Reaktion auf ein ausserordentlich schwieriges Ereignis.»				
1.6	*Cultural Concepts of distress: Verbal Expressions: Metaphors and Phrases*	***Metaphors regarding grief reactions:*** *«Es kann sich anfühlen, als hätte man **sein Herz, sein Leben oder seine Seele verloren**. Der Schmerz kann sich **wie Feuer** anfühlen, **wie Schwärze** oder eine unendliche **Schwere**.»* *«Für manche ist Trauer wie ein **grosser, schwerer Stein, den man auf den Schultern trägt**. Für andere fühlt sich der Schmerz wie das **Meer** an. Mal sind es überwältigende und grosse Wellen, mal ist das Wasser ruhig und der Schmerz leichter zu ertragen. Für wiederum andere fühlt sich der Schmerz wie ein **Feuer** an, **das sich im Körper verbreitet**.»*	*Inclusion of culture-specific grief metaphors*	KIIE1: Nr. 5, Nr. 31 Hassan et al., 2015	Strong	
1.7	*Cultural Concepts of distress: Verbal Expressions: Metaphors and Phrases*	***Exercise: Finding a metaphor for your grief*** *"Findest du ein Bild für deine Trauer?" Wie fühlt sie sich bei dir an?»*	*Promoting self-awareness/expressing own grief (seen as a cure for grief by Arab refugees) without asking too many details; Giving the participant the opportunity to add their own culture-specific metaphors, which may not have been captured by the content so far.*	KIIE1: Nr. 5, Nr. 20 Lechner-Meichsner & Comtesse, 2022	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
1.8	*Cultural concepts of distress: Specific target symptoms*	***Grief symptoms*** *«Manche Menschen erleben starke **Traurigkeit, Angst, Wut, Schuldgefühle**. Andere **fühlen gar nichts, fühlen sich wie taub.*** *Viele Menschen haben nach einem Verlust **körperliche Schmerzen (z. B. Kopfschmerzen, Bauchschmerzen, Rückenschmerzen**) und **Schlafprobleme**, manchmal **Albträume**.* *Viele trauernde Menschen **ziehen sich zurü**k. Sie **sprechen weniger**. Andere **hören auf, Dinge zu machen, die ihnen früher Freude bereitet habe**n. Manchen **fällt es schwer, ihren Aufgaben nachzugehen**.* *Bei manchen **kreisen die Gedanken viel um den Verlus**t. Einige können sich **schlechter konzentrieren**. Viele machen sich **Vorwürfe**.»*	*Inclusion of culture-specific symptoms*	KIIE1 & KIIU1: Nr. 1-4 KIIE1: Nr. 6 Hassan et al., 2015	Strong	
1.9	*Community, need, stigma and context: Mental Health*	***Testimonials: Grief reactions*** *Inclusion of video testimonials of affected Syrian individuals speaking about the grief reactions they experienced*	*Inclusion of video testimonials of Syrian individuals to normalize grief reactions, and promote speaking more openly about grief and counteract stigma (which could also be a potential barrier)*	KIIE1: Nr. 23, Nr. 18, Nr. 21, Nr. 26, Nr. 30	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
	related stigma *or* *Treatment Components: Contents: Intervention and Exercises: Psychoeducation and Normalization*			Hassan et al., 2015 Dominick et al., 2009		
1.10	*Treatment Components: Contents: Intervention and Exercises: Psychoeducation and Normalization*	***Exercise: Select your own grief reactions*** *Users select the grief reactions they recognize from themselves from a list or add missing reactions.*	*Promoting self-awareness/expressing own grief without asking too many details was expressed by Syrians as cure for grief and at the same time has also been used in a similar fashion in other grief interventions (e.g., CG-CBT).*	KIIE1 & KIIU1: Nr. 1-4, KIIE1: Nr. 21 Lechner-Meichsner & Comtesse, 2022 Rosner et al., 2014	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
1.11	*Community need, stigma and context: Specific needs and other relevant contextual information: "What matters most"*	***Consequences of grief reactions on life*** *«Vielleicht ist es schwieriger, für die **Familie** da zu sein. Oder es **fällt schwer, Neues zu lernen** oder einer **Arbeit** nachzugehen. Vielleicht trifft man weniger **andere Leute**.»*	*Inclusion of "what matters most" in domains of life where people are affected, such as the family, work/education and the social network in general.*	KIIE1: Nr. 14	Moderate	
1.12	*Community, need, stigma and context: Mental Health related stigma* *or* *Treatment Components: Contents:*	***Testimonials: Consequences of grief reactions on life*** *Inclusion of video testimonials of affected Syrian individuals speaking about the consequences of grief reactions on their life which they experienced*	*Inclusion of video testimonials of Syrian individuals to normalize grief reactions, and promote speaking more openly about grief and counteract stigma*	KIIE1: Nr. 23, Nr. 18, Nr. 21, Nr. 30 Hassan et al., 2015 Dominick et al., 2009	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
	Intervention and Exercises: Psychoeducation and Normalization					
1.13	*Treatment Components: Contents: Intervention and Exercises: Psychoeducation and Normalization*	***Exercise: Select your own consequences of grief reactions*** *Users select life domains where they feel a consequence from their grief reactions from a list or add missing reactions.*	*Promoting self-awareness/expressing own grief without asking too many details; preparing users to think about their goal for the app*	KIIE1 & KIIU1: 1-4, KIIE1: Nr. 21 Lechner-Meichsner & Comtesse, 2022	Strong	
1.14	*Treatment Components: Framing: Treatment rationale/ Treatment goal*	***Metaphor for treatment rationale/treatment goal of the app*** *«Stelle dir die Trauer wie einen **Rucksack vor, der mit schweren Steinen gefüllt** ist. Der Rucksack ist so schwer, dass du deinen Weg kaum weitergehen kannst.* *Diese App soll dir helfen, ein paar Steine aus dem Rucksack zu nehmen, damit er leichter wird. Und sie soll dir helfen, deine Kraft zu finden und dich zu*	*Inclusion of culturally specific metaphor for grief (heaviness), metaphor of backpack has been used for refugee groups before* *Inclusion of commonly used metaphor of a journey for life*	KIIE1: Nr. 5, Nr. 19, Nr. 31 Alladin, 2015 Liedl et al., 2016	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
		stärken. So kannst du das Gewicht besser tragen. Das Ziel ist, dass du mit deinem Rucksack den Weg so weitergehen kannst, dass es für dich stimmt.»	*Underlining the importance of treatment for their present and future life*			
1.15	*Treatment Components: Framing: Treatment rationale/ Treatment goal*	***Treatment rationale / treatment goal of the app*** *«Das Ziel dieser App ist nicht, dass deine Trauer verschwindet. Ziel ist, dass du mit deiner Trauer umgehen kannst.»* *«Es geht in dieser App darum, eine **Balance** zu finden zwischen dem **Schmerz** und der **Kraft**. Du wirst einen Weg finden, um mit deiner Trauer weiterzuleben. Und es geht darum, dass du deine **Ziele jetzt und in der Zukunft** erreichst.»*	*Focus on both restoration-oriented goals (focus on goals now and in future, resources and strengths) as well as loss-oriented goals (dealing with the pain of grief) according to the dual process model of grief* *Has been previously used in iCBT Intervention for bereavement*	KIIE1: Nr. 19, Nr. 20 Tur et al., 2022	Strong	
1.16	*Treatment Components: Framing: Treatment rationale/ Treatment goal*	***Exercise: Goal setting*** *Users are given instructions and culturally relevant examples for goals and asked to set their own specific goals for the use of the app.* *Examples:* ● *«Ich möchte mehr für meine **Familie** da sein.* ● *Ich möchte mich in meinem **Deutschkurs** besser konzentrieren können.*	*Culturally and contextually (e.g., related to refugee experience such as integration and future perspectives) relevant treatment rationales* *Inclusion of culturally relevant examples related to «what matters most»* *Has been previously used in preventive IBI for prolonged grief disorder*	KIIE1: Nr. 19, Nr. 14, Nr. 9, Nr. 20 Litz et al., 2014	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
		● *Ich möchte lernen, mit intensiven Gefühlen umzugehen.* ● *Ich möchte öfter **mit Freunden** einen Kaffee trinken.* ● *Ich möchte **Ziele für die Zukunft** haben.»*				
1.17	*Treatment Components: Contents: Interventions and exercises: Psychoeducation*	***Mind-body connection*** *Psychoeducation about the interconnectedness of mind and body, as well as explaining how by using mindfulness we are able to change our reaction to stress and reduce negative feelings:* *«Was wir denken und fühlen, hat einen direkten Einfluss auf unseren Körper.* *Wenn du gestresst oder ängstlich bist, dann schlägt zum Beispiel dein Herz schneller oder du hast Bauchschmerzen. Bei einem schlimmen, sehr stressreichen Ereignis, wie dem Verlust einer geliebten Person, haben deswegen sehr viele Leute körperliche Schmerzen.* *Umgekehrt kannst du aber auch mit deinen Gedanken und deinem Körper den Stress bewusst reduzieren und mehr positive Gefühle haben.*	*Importance of including somatic symptoms as they are very prevalent in the target group and explaining connection between mind and body (e.g., how stress/worry can have an impact on the body in the form of e.g., headaches)* *Including culture-specific explanation for problems, which are often described as somatic in the target group and the explanatory model as more medical (focus on stress, brain and bodily health), in order to reduce barrier to treatment*	KIIE1 & KIIU1: Nr. 4 KIIE1: Nr. 21, Nr. 26, Nr. 6 Gearing et al., 2013; Abi Ramia et al., 2018; Hassan et al., 2015 Aeschlimann et al., 2024	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
		Es ist wissenschaftlich bewiesen, dass wir unsere Gedanken trainieren können. Wir können sie trainieren, sich mehr auf den jetzigen Moment zu konzentrieren, anstatt ständig in die Zukunft oder in die Vergangenheit zu wandern. *Dies aktiviert im Gehirn bestimmte Teile, die gute Gefühle auslösen. Schlechte Gefühle und Stress werden weniger. Das wirkt sich auch gut auf deine körperliche Gesundheit aus.»*				
1.18	*Treatment Component: Framing: Explanatory model/ Treatment rationale*	***Metaphor for rationale behind regular practice*** *"Aber genau wie du einen **Muskel trainierst**, braucht auch das viel **Training**. Mit der Zeit wird die Übung immer einfacher."* *"So **trainierst** du dein **Gehirn** trotzdem.»*	*Inclusion of a more medical metaphor to explain the importance of practicing mindfulness exercises to feel their effect, due to preference for more medical explanations in the target group (may reduce stigma/barrier to treatment)* *Has been previously used in IBI with Syrian refugees*	KIIE1: Nr. 18, Nr. 19, Nr. 26, Nr. 6, Nr. 31 Gearing et al., 2013; Abi Ramia et al., 2018; Hassan et al., 2015	Strong	
1.19	*Treatment Components: Contents:*	***Awareness-Exercise:*** *Before and after most exercises, participants are asked to take a moment to be aware of how they*	*Promoting user's awareness of what is helpful to them. Provides a type of monitoring to them that is similar to the*	KIIE1 & KIIU1: Nr. 4	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
	Intervention and exercises: Mindfulness-, relaxation- and body-related exercises	*are feeling (body, emotions, sometimes thoughts) and notice any changes in how they feel after the exercise.* *«Bevor du anfängst, nimm wahr, wie du dich gerade fühlst. Wie fühlt sich dein Körper an? Bist du angespannt? Fühlen sich gewisse Körperteile schwer an? Ist gerade ein bestimmtes Gefühl da? Schreibe kurz auf, was du wahrnimmst.»*	*mood tracking implemented in other IBIs for Arabic speaking refugees (e.g., PTSD Coach) or the question about "what has changed?" from CG-CBT.* *Mindful approaches a culturally acceptable and feasible approach in the target group* *Specific focus on physical sensation due to the target group's strong focus on somatic symptoms*	KIIE1: Nr. 21, Nr. 26, Nr. 6 Blignault et al., 2021 Miller-Graff et al., 2020 Rosner et al., 2015		
1.20	*Treatment Components: Contents: Intervention and exercises: Mindfulness-, relaxation- and body-related exercises*	***Mindfulness-Exercise: 5-senses exercise*** *Users learn a grounding strategy for emotion-regulation via an audio-exercise for when they feel overwhelmed by their grief reactions*	*Inclusion of relaxation and body-related exercises to target somatic symptoms.* *Mindful approaches are a culturally acceptable and feasible approach in the target group* *Has been previously used in IBI with Syrian refugees*	KIIE1 &KIIU1: Nr. 4 KIIE1: Nr. 21 Abi Ramia et al., 2018; Blignault et al., 2021	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
1.21	*Treatment Components: Content: Intervention and exercises: Psychoeducation and normalization* *or* *Cultural concepts of distress: Verbal expressions: Metaphors and Phrases*	***Rumi-poem as metaphor for acceptance of range of emotions*** *«Das menschliche Dasein ist ein Gasthaus.* *Jeden Morgen ein neuer Gast.* *Freude, Depression und Niedertracht – auch ein kurzer Moment von Achtsamkeit kommt als unverhoffter Besucher.* *Begrüsse und bewirte sie alle!* *Selbst wenn es eine Schar von Sorgen ist, die gewaltsam dein Haus seiner Möbel entledigt, selbst dann behandle jeden Gast ehrenvoll. Vielleicht bereitet er dich vor auf ganz neue Freuden.* *Dem dunklen Gedanken, der Scham, der Bosheit – begegne ihnen lachend an der Tür und lade sie zu dir ein.* *Sei dankbar für jeden, der kommt, denn alle sind zu deiner Führung geschickt worden aus einer anderen Welt.»*	*Inclusion of culturally relevant metaphor in the form of a popular middle eastern poem in the target group to promote engagement; poem to help with emotional self-reflection and meaning making as used in a grief intervention for Norwegian mothers (no evidence so far with Syrian individuals)*	KIIE1: Nr. 21, Nr. 31 Lehmann et al. 2022	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
1.22	*Treatment Components: Content: Intervention and exercises: Psychoeducation and normalization*	***<u>Psychoeducation about the function of emotions and about coping with emotions</u>*** *«Gefühle haben verschiedene Funktionen.* *Sie sind unter anderem da, um Aufmerksamkeit auf etwas zu lenken. So wie körperlicher Schmerz die Aufmerksamkeit auf eine blutende Wunde lenkt.* *Sie sind da, um uns Informationen darüber zu geben, wie wir bestimmte Situationen bewerten. Sie dienen als eine Art Kompass.* *Und sie beeinflussen unser Verhalten. Wenn ich in einer bestimmten Situation Angst habe, werde ich vielleicht fliehen. Und ich werde diese Situation in Zukunft eher vermeiden.* *Gefühle sind also sehr wichtig, damit wir uns im Alltag zurechtfinden.»* *«Viele Menschen, die schmerzliche Gefühle erleben, versuchen diese nicht zu beachten und zu verstecken.*	*Focus on normalizing painful feelings and the desire to suppress them (e.g., due to stigma or gender norms) through psychoeducation, providing explanation on how to cope with them, providing rationale based on creating a balance between all different kinds of feelings as opposed to just reducing negative feelings*	KIIE1: Nr. 21, Nr. 18, Nr. 20 Hassan et al., 2015	Strong	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
		Das ist sehr verständlich und menschlich. *Vielleicht kennst du das auch von dir.»* *«Einen wichtigen 1. Schritt, um mit schwierigen Gefühlen umzugehen, hast du schon gemacht: Du hast sie wahrgenommen und sie benannt.* *Dies kann schon entlastend sein.»* *«Als nächstes kommt ein Schritt, der sehr schwierig sein kann: du gibst den Gefühlen Raum. Du lässt sie zu, anstatt mit viel Energie dagegen zu kämpfen.* *So hast du auch wieder Energie für die guten Gefühle. Es gibt mehr **Balance** zwischen den unterschiedlichen Gefühlen.»* *«Wichtig ist, dass du selbst bestimmen kannst, wie viel Raum du den Gefühlen gibst. Das kann auch ganz kurz sein.*				

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
		*Es ist wichtig, die schlechten Gefühle auch mit guten Gefühlen **auszubalancieren**. Es ist auch wichtig zu schauen, was dir gerade guttut.»*				
1.23	*Treatment Components: Content: Intervention and exercises: Psychoeducation and normalization*	***Metaphor for dealing with emotions*** *The metaphor describes acceptance instead of fighting against emotions* *«Stelle dir vor, diese schwierigen Gefühle wären ein mit Luft gefüllter Ball. Du versuchst, ihn unter Wasser zu drücken, damit du ihn nicht mehr siehst.* *Das ist sehr anstrengend und braucht viel Energie.* *Wenn du ihn loslässt, schiesst er mit doppelter Kraft aus dem Wasser heraus.* *Gefühle für lange Zeit wegzudrücken, kostet dich also sehr viel Energie. Sie können sich dadurch auch verschlimmern.»* *«Stell dir wieder den Ball im Wasser vor. Das würde bedeuten, dass der Ball da ist und friedlich auf dem Wasser schwimmen darf.»*	*Metaphor was taken from acceptance and commitment therapy (ACT)interventions to target emotion dysregulation developed in WEIRD context and not adapted. Will need to be tested to see if it is culturally acceptable.*	KIIE1 & KIIU1: Nr. 1 KIIE1: Nr. 31	Moderate	

	Criterion 7: Specific treatment elements **Criterion 8: Unspecific elements and therapeutic techniques**					
Decision-Nr.	**Mechanisms of action including treatment elements, techniques, delivery, surface**	**Original intervention / Content**	**Cultural Processes related to mechanism of action**	**Evidence base** e.g., literature review, focus groups, qualitative interview	**Quality of evidence** Strong Moderate Weak	**Suggestions from research team**
1.24	*Treatment Components: Contents: Intervention and exercises: Mindfulness-, relaxation- and body-related exercises*	***Exercise: Sitting with difficult emotions and breathing exercise*** *Users learn an exercise to let their feelings come and go (like in Rumi's guesthouse), they end the exercise by learning a breathing technique for emotion-regulation for when they feel overwhelmed by painful feelings*	*Inclusion of relaxation and body-related exercises to target somatic symptoms.* *Mindful approaches a culturally acceptable and feasible approach in the target group*	KIIE1 & KIIU1: Nr. 4 KIIE1: Nr. 21 Blignault et al., 2021 Lehmann et al., 2022	Strong	
1.25	*Treatment Components: Contents: Intervention and exercises: Resource activation*	***Option: Diary function*** *Users are introduced to a diary function that they can use throughout using the app to journal, reflect their feelings, etc.*	*Inclusion of diary function as a form of resource activation and a way of promoting self-reflection.* *Possibility to use the diary function individually depending on their needs*	KIIE1: Nr. 21, Nr. 20, Nr. 32 Tur et al., 2022	Strong	

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