

## Original Research Reports

# The Needs of Victims: An Empirical Categorization Based on Interpersonal Conflicts

Johanna Kirchhoff<sup>\*a</sup>, Micha Strack<sup>b</sup>, Ulrich Wagner<sup>a</sup>

[a] University of Marburg, Marburg, Germany. [b] University of Göttingen, Göttingen, Germany.

## Abstract

As a consequence of interpersonal conflicts, needs of the victimized are violated. These needs have to be addressed in order to achieve reconciliation. Due to the heterogeneity of need categories in scholarly research, we scrutinized which need categories can be empirically identified. 478 participants reported on an experienced interpersonal conflict. They responded to 109 items evaluating the perceived need violation for the conflict they reported on. By means of exploratory factor analysis with a random sub-sample ( $n_1 = 239$ ), six need categories were extracted. These are the need for respect, the need for meaning, the need for acceptance, the need for pleasure, the need for self-efficacy, and the need for safety. Confirmatory factor analyses showed that these needs replicated in the second random sub-sample ( $n_2 = 239$ ) as well as across sub-samples with people who had experienced an interpersonal conflict of lower severity of transgression ( $n_A = 257$ ) or higher severity of transgression ( $n_B = 221$ ). In addition, each of the need categories mediated the relationship between the severity of transgression and the desire for revenge. Yet, the results for the two need categories “pleasure” and “safety” have to be interpreted with caution due to a lack of scalar invariance. Among the other four need categories, respect was identified as the only independent mediator variable. Implications for the transformation of interpersonal conflict and further scholarly inquiries are discussed.

**Keywords:** needs, need violation, need categories, interpersonal conflict, victimization

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\*Corresponding author at: Working Group Social Psychology, Department of Psychology, Philipps University Marburg, Gutenbergstraße 18, 35032 Marburg, Germany. E-mail: johanna.kirchhoff@uni-marburg.de



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## Why Study the Categorization of Victim Needs?

Human beings have basic, shared needs that are prone to violation as a consequence of conflict (Staub, 2003). Over the past fifty years societal and scholarly interest in the needs of victimized people has increased and victims of crime have gained a more central position within the setting of criminal justice (Kiza, Rathgeber, & Rohne, 2006; Simmonds, 2009). In recent years, the European Parliament has even brought forward a proposal on establishing standards for the rights as well as the support and protection of victims of crime. The proposal aims at strengthening the support for victims of crime in terms of their special needs (European Commission, 2011). Furthermore, unlike in past decades today it is common that mental health practitioners offer need-oriented support

to people who have been victimized — not only in cases of extreme, but also of every day violence (Fassin & Rechtman, 2009, pp. 4-5). The underlying idea of strengthening approaches that are aware of the needs of victimized people is not solely to contribute to justice restoration (Okimoto & Wenzel, 2008) and reconciliation after a conflict has taken place (Staub, 2003), but also to improve the standing of the powerless in civil society (Max-Neef, Elizalde, & Hopenhayn, 1991). Neglecting the needs of the victimized thus can hinder the forthcoming of reconciliation and social justice (e.g., Janoff-Bulman & Werther, 2008; Shnabel & Nadler, 2008).

The present paper focuses on violated needs in the realm of interpersonal conflicts. Knowledge about the needs of victims of interpersonal conflict is of social importance because addressing violated needs is considered to restore broken relationships and prevent violent vengeance (Fehr & Gelfand, 2010; Lazare, 2004, pp. 44, 242). In other words, the violated needs of the parties in conflict have to be dealt with in order to achieve reconciliation (Shnabel & Nadler, 2008; Staub, 2003). Interventions to achieve interpersonal reconciliation that focus on the victimized include symbolic interventions such as apologies, and material ones such as reparations (Staub, 2003; Stubbs, 2007). It is assumed that these interventions target the violated needs of the victimized (Lazare, 2004, p. 242; Shnabel & Nadler, 2008). However, what needs of the victimized are violated as a consequence of an interpersonal conflict is a question that has not yet been sufficiently empirically addressed (Simmonds, 2009). The basic research question that lies at the core of this paper is therefore: What are the needs that can be identified as relevant for victims of interpersonal conflict?

It is assumed that the needs of victims differ from those of people in other situations (Simmonds, 2009). The categorization of human needs in previous literature has been vast, and yet their empirical foundation has been scarce (Max-Neef et al., 1991; Obrecht, 2005). The latter also applies to the categorization of the needs of victims (Simmonds, 2009). To add to previous research, we referred to existing need categories and developed a survey on violated needs in the aftermath of interpersonal conflict. By means of the survey we asked people to report on violated needs after having experienced an interpersonal conflict in which they felt victimized. The empirical data was then quantitatively analyzed. Furthermore, we wanted to analyze the importance of addressing the violated needs of victimized people for the resolution of interpersonal conflict. Accordingly, we also empirically explored the link between violated needs of the victimized and their desire for revenge.

## Previous Theories on Categories of Needs and Suggestions for Their Systematization

To answer the question which needs of victims are violated as a consequence of interpersonal conflict, one could confine oneself to need categories that are proposed in previous literature. However, the confining process proves to be challenging, because the suggested need categories are very heterogeneous (Max-Neef et al., 1991; Obrecht, 2005). Furthermore, we considered it to be important to not simply refer to need categories based on theoretical assumptions but to also test empirically which need categories are relevant for people who have been victimized. Thus, we drew on previous literature in order to develop a survey to assess which needs are experienced as having been violated among people victimized in interpersonal conflict.

For the development of the survey we took into account five major, basic need theories (Maslow, 1954/1970; Max-Neef et al., 1991; Murray, 1949; Obrecht, 2005; Schwartz, 1992) as well as need categories that have been suggested explicitly for victims in previous literature (e.g., Frijda, 1994; Shnabel & Nadler, 2008; Tedeschi & Nesler, 1993).

Murray (1949) developed a categorization that has formed the basis for many other need theories (Costa & McCrae, 1988; Galliker, 2009, p. 174). His categorization can be subdivided into 12 viscerogenic needs (such as water and food) and 26 psychogenic needs (such as recognition, affiliation, order or autonomy; Murray, 1949, pp. 77-83).

The need theory by Maslow (1954/1970), consisting of five basic needs (physiological, safety, belonging, esteem, and self-actualization needs), is the most popular one. Maslow's (1954/1970) theory is widely accepted, despite critics who reject the hierarchical order of needs he suggested (Wahba & Bridwell, 1976).

The categorizations by Max-Neef et al. (1991) with nine needs and by Obrecht (2005) with 17 needs are unique, because these authors have chosen an interdisciplinary approach (Max-Neef et al., 1991) and an approach that integrates other need theories (Obrecht, 2005). While Max-Neef et al. (1991) do not divide the suggested needs (subsistence, protection, affection, understanding, participation, leisure, creation, identity, and freedom) into further sub-categories, Obrecht (2005) does. He differentiates four biological needs (need for physical integrity, e.g., avoidance of exposition to violence; need for the substitute materials that are necessary for autopoiesis, e.g., water; need for regeneration, and need for sexual activity), six biopsychological needs (sensory needs, e.g., light; aesthetic needs, e.g., beautiful forms; need for variety, need for information relevant to orientation and action, need for subjective meaning, need for control and competence) and seven biopsychosocial needs (need to help others, need for distinctiveness, as well as needs for social recognition, for autonomy, for justice, for membership, and for love).

The fifth major categorization we took into account is Schwartz's (1992) theory of 11 human values (self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism), which can be referred to as needs (Bilsky, 1999). Schwartz's (1992) categorization is interesting for our study, because it has already been established for quantitative empirical evaluation within standardized surveys in Europe (Schmidt, Bamberg, Davidov, Herrmann, & Schwartz, 2007).

Further, we referred to theoretical suggestions for need categories explicitly for victims (e.g., Frijda, 1994; Shnabel & Nadler, 2008; Tedeschi & Nesler, 1993, pp. 15-16). What the suggestions for need categories for victims have in common is that they focus more explicitly than the previously mentioned, general need categories on the restoration of a level of satisfaction that was present prior to the victimization. Writing about the gains of revenge, Frijda (1994, pp. 281-282) names gains at five levels, which can be interpreted as motivations or needs that lead to vengeance. These five categories are the protection of further threat, the re-equilibration of gains and losses, the re-equilibration of the power-imbalance, the restoration of self-esteem (self-identity and self-efficacy), and affect regulation such as the relief of pain. Not writing about gains of revenge but instead about events that produce grievances in victims, Tedeschi and Nesler (1993, pp. 15-16) name four conditions that can be understood as needs of victims. These are a positive social identity, material safety, a need to have rights, and the absence of physical injury. Last but not least, Shnabel and Nadler (2008) have introduced the need for empowerment as particularly relevant for conflict resolution from the perspective of the victimized.

We also took into consideration reappearing suggestions regarding need violations as a consequence of conflict within the literature on reconciliation (e.g., Lazare, 2004, pp. 45-119; Ren & Gray, 2009; Robbenolt, 2008, pp. 202-226; Smith, 2008, pp. 28-80; Strang et al., 2006). The overarching goal of our study was to systematize recurring needs that might be violated, according to people who were victimized in interpersonal conflicts, based

on the quantitative analysis of survey data. The present study is, as far as we know, the first that realizes such intent.

Overall, we tested three hypotheses that are presented in the following.

**H1:** *After interpersonal conflict distinct needs of the victimized can be identified, which replicate across random sub-samples.*

Previous research has proposed and empirically tested the idea that needs are universal insofar that they apply across contexts (Maslow, 1954/1970, p. 54; Schwartz, 1992; Staub, 2003). Accordingly, we assume that the needs of victimized people are not only applicable to different samples but also exist independently of the triggering conflict's level of severity.

**H2:** *The need categories of victims apply to interpersonal conflicts of lower and of higher severity.*

Even though needs are considered to be consistent across context and cultures, the intensity of violated needs after interpersonal conflict can vary. This is because the relative importance of specific needs can be influenced by contextual factors such as event valence, i.e., the severity of the transgression (Carroll, Arkin, Seidel, & Morris, 2009; Guan, Park, & Lee, 2009; Sheldon, Elliot, Kim, & Kasser, 2001). A change in the intensity of needs corresponds with a continuative concept of need fulfillment ranging from frustration to satisfaction (Alderfer, 1969). Knowing which needs of victimized people are violated and to what extent is relevant for forgiveness and reconciliation in the aftermath of interpersonal conflict. For example, for interventions such as apologies, which are implemented to promote forgiveness and to reduce the desire for revenge, it is not only regarded as important that they address the violated needs of the victimized (Fehr & Gelfand, 2010; Lazare, 2004, p. 242; Shnabel & Nadler, 2008). It is also suggested that such interventions have to outweigh the offence (Benoit, 1995, p. 43). Likewise, Frijda (1994, p. 281) describes revenge as a behavior aiming to address violated needs and it is empirically supported that a higher severity of transgression has a more negative impact on forgiveness or the desire for revenge, respectively (Fehr, Gelfand, & Nag, 2010). Thus, we propose that the relationship between the severity of transgression and the desire for revenge can be explained by the intensity of need violations.

**H3:** *The relationship between the severity of transgression and the desire for revenge is mediated by the intensity of need violations experienced by the victimized.*

To test our three hypotheses on the stability of identifiable need categories of victimized people across random sub-samples (H1) and for conflicts of varying severity (H2) as well as on the relevance of violated needs for conflict resolution (H3), we conducted an online survey among people who had felt victimized in a previously experienced interpersonal conflict.

## Method

### Sample

German speaking participants were recruited via several mailing lists and online platforms. Snow-ball sampling was used, starting from mailing lists of the University of Marburg as well as the intranet for scholarship students of the Heinrich Böll Foundation. Out of 606 people who were willing to participate, 93 participants were defined as dropouts due to incomplete data sets. Another 35 were eliminated from the analysis because, contrary to the

instructions, they reported on a conflict from the perspective of the offender and not the victimized. The remaining 478 (370 women; 108 men) participants were included in the analyses. On average, the participants were 29.80 years old ( $SD = 10.05$ ; range: 15 - 65). The majority of participants had a high educational background (452 people had at least Abitur, an advanced high school degree that allows for the admission to university<sup>i</sup>). Additional information about ethnicity, migration background, or religion was not requested.

## Procedure

Designed as an online-questionnaire, the study was distributed via mailing lists and accessible to a German-speaking public. In order to obtain a variety of conflicts for which participants rated the violation of their needs, each participant was told to recall an interpersonal conflict in which s/he felt that s/he had been inferior or the victim, ranging from low level to very severe experiences. First, participants were asked to write a short statement about the conflict they remembered in order to make this experience salient. Participants were then asked to answer all subsequent items as if the incident had just happened. These items assessed the severity of the transgression, the violation of needs, and the desire for revenge. The items appeared in the same order for all participants. Finally, participants had the opportunity to provide comments concerning the study. The format of the questionnaire required participants to answer all items.

## Measures

### Severity of the transgression

The severity of transgression was assessed with two items. In addition to measuring the perceived severity of the transgression with a single item we also asked about the transgressor-transgressed-relationship, i.e., the perceived weakness of the person who experienced a transgression. Both items can be interpreted as measures to evaluate the perceived harm of a transgression (see [Miller & Vidmar, 1981](#), pp. 160-163). Thus, participants evaluated the items “I perceived the situation as [not so severe (1) – very severe (6)]” and “In the situation I perceived myself to be [very strong (1) – very weak (6)]” each on a 6-point rating scale. The Cronbach’s alpha of this scale was  $r = .36$ , a moderate but acceptable correlation according to [Cohen \(1969/1988\)](#).

### Need violations

We screened the literature mentioned above for items that assess needs. Items from existing questionnaires were adapted to suit the format of the study at hand. The need category proposed by [Shnabel and Nadler \(2008\)](#) was assessed with items that they have introduced. The need categories introduced by [Maslow \(1954/1970\)](#) were covered by items used by [Porter \(1961\)](#) as well as [Arzberger, Murck, and Schumacher \(1979\)](#). The need categories listed by [Murray \(1949\)](#) were assessed in accordance with items in the D-PRF ([Stumpf, Angleitner, Wieck, Jackson, & Beloch-Till, 1985](#)) and additional items were designed<sup>ii</sup>. Basic human values systematized by [Schwartz \(1992\)](#) relied on the Portrait Values Questionnaire (PVQ by [Schwartz et al., 2001](#); PVQ-21 by [Schwartz, 2003](#)). We designed additional items to assess need categories suggested in the literature on reconciliation (see above), as well as the ones mentioned by [Frijda \(1994\)](#), [Max-Neef et al. \(1991\)](#), and [Obrecht \(2005\)](#). Examples for need items in our study are: “*Because of the incident I have the feeling that the person(s) question(s) my values.*” and “*The incident kept me from being modest and humble.*” The first item is operationalized in line with the tradition value by [Schwartz et al. \(2001\)](#) and the second item in accordance with the need for identity as mentioned by [Max-Neef et al. \(1991\)](#). All other items were worded in this format, starting with “Because of the incident I had/have the feeling that...” or “The incident kept me from...” Each of the resulting 109 items were rated by participants on 5-point scales, ranging from “does not apply at all (1)” to “totally applies (5)”.

The complete list of all 109 items is documented in Appendix A, grouped into 17 a priori need categories according to verbal descriptors, i.e. themes and related concepts of the categories suggested in the literature.

### Desire for revenge

Participants were asked to complete seven self-designed items regarding their desire for revenge, rated on 5-point scales ranging from “does not apply at all (1)” to “totally applies (5).” These items were: “I can imagine to forgive the person(s) if s/he/they apologize(s) to me” (reverse-coded), “Because of what happened I want to punish the person(s)”, “Because of what happened the person(s) has/have to provide a compensation”, “I want to really tell the person(s) off”, “Because of what happened, I would really like to lambaste the person(s)”, “Because of what happened, I will arrange that it will be known what the person(s) did to me” and “Because of what happened, I will arrange that the person(s) will receive a bad reputation”. The Cronbach’s alpha of this scale was .70.

## Results

A content analysis of the written short statements describing the conflict stories was conducted by the first author (see Kondracki, Wellman, & Armundson, 2002). First, it was inductively coded in which setting the conflicts took place, extracting six categories: 1. relationship (e.g., “conflict with my boyfriend”), 2. work (e.g., “dispute with my boss”), 3. family (e.g., “problems with my mother”), 4. friends (e.g., “my best friend lied to me”), 5. strangers (e.g., “conflict due to a car accident on the highway”), and 6. neighbours/acquaintances (e.g., “I had a dispute over cleaning the flat with my roommates”). Of the 482 reported scenarios<sup>iii</sup> 156 (35.53%) were categorized as conflicts in relationships, another 75 (17.08%) were about conflicts in the workplace context and 68 (15.49%) about conflicts within families. Further 58 (13.21%) conflicts involved good friends, 44 (10.02%) strangers and 32 (7.29%) neighbors or acquaintances. The categories were not mutually exclusive. Three conflicts took place in the context of close relationships and also involved good friends (0.68%). One conflict each took place at work but also involved good friends (0.23%) or strangers (0.23%), another conflict involved good friends as well as neighbors or acquaintances (0.23%). A second coder analyzed 30% of the statements (144). Because the codes were assigned based on clear-cut words (e.g., „work“, „best friend“, „sister“, „partner“ etc.), interrater reliability was very high (Cohen’s Kappa = .96).

The reported experiences ranged from small disputes among friends to severe conflicts including muggings and violence (e.g., “I and my kids were attacked and robbed in our own house. My kids were threatened with a knife to their throat and I was tied up and gagged.”). However, physical violence was involved in only 49 (11.16%) of the reported conflicts.

### Testing H1 and H2

First, the number of items on need violation was reduced. All items that were of no importance in the conflict situations, i.e., all items with a mean of below 1.50, were dropped from further analyses. By using this criterion, 16 items were dropped. Indeed, some participants scored higher on these items, but the majority (at least 73.3% of the participants) answered with “1” = “does not apply at all.” The remaining 93 items were considered in the following analyses.

In order to cross-validate the results of the factor analyses, sub-sampling was applied. For the first two sub-samples a random split was used ( $n_{\text{Group1}} = 239$  and  $n_{\text{Group2}} = 239$  participants). We used the mean of the rating for the

transgression severity ( $M = 4.55$ ,  $SD = 1.06$ ) in order to produce two further sub-samples. This resulted in a group of participants that reported on a less severe ( $n_{\text{Group A}} = 257$ ; transgression severity  $\leq 4.5$ ) and a group that reported on a more severe transgression ( $n_{\text{Group B}} = 221$ ).

The answers of the first random group (Group 1) were analyzed by means of exploratory principal-axis factoring, using oblique rotation (PROMAX) since the different need categories were expected to be correlated (see [Max-Neef et al., 1991](#), p. 17). The Kaiser-Meyer-Olkin (KMO) measure was .88 and all KMO values for individual items were above .64 (exceeding the suggested minimum of .5, [Field, 2009](#), p. 647). Bartlett's test of sphericity indicated that the correlations among items were sufficiently large:  $\chi^2(4278) = 14221.85$ ,  $p < .001$ . Multicollinearity was also not observed (no correlations above .8 among items). A parallel analysis was conducted according to [Horn \(1965\)](#), revealing that the eigenvalues proposed an extraction of six factors.

Based on the initial factor analysis with the 93 items we revealed a factor referred to as "need for pleasure" (sum of squared loading: 15.80), a factor "need for meaning" (13.87), a factor called "need for acceptance" (11.48), a factor "need for self-efficacy" (11.47), a factor "need for safety" (6.90), and a factor "need for respect" (5.90). Overall, the six factors accounted for 46.20% of the variance. [Stevens \(2002\)](#) suggests that each item has to load on its own factor with at least .40 and on any other factor with less than .40 in order to establish an appropriate cut-off for the selection of items per factor. Of the 93 items included in the factor analysis, 23 items fulfilled these criteria and were grouped for theoretical reasons. The six factors with the selected 23 items accounted for 67.73% of the variance. The results of the factor analysis along with the final item selection are depicted in [Table 1a](#) and [Table 1b](#).

In order to see if results replicated across different samples (H1) and conflicts of varying severity of transgressions (H2), the initial factor analysis was followed by confirmatory factor analyses for the second random group (Group 2) and for the low severity (Group A) as well as the high severity group (Group B). The confirmatory factor analyses were computed with MPlus 6 ([Muthén & Muthén, 2010](#)). The model fit was evaluated using the CFI (comparative fit index; [Bentler, 1990](#)), the RMSEA (root mean square error of approximation; [Steiger, 2000](#)) and the SRMR (standardized root mean squared residual; [Hu & Bentler, 1999](#)). How well a model fits the data can be estimated by applying the following standards: a RMSEA  $< .08$ , a SRMR  $< .10$ , a  $\chi^2/df$  ratio between 2 and 3, and a CFI  $> .95$  ([Schermelleh-Engel, Moosbrugger, & Müller, 2003](#)). Since the main interest of the analyses was to determine to what extent the factor structure found in the exploratory analysis for Group 1 corresponds with the data of the other groups, the focus of the evaluation of the model fit was laid on the RMSEA and the SRMR ([Schermelleh-Engel et al., 2003](#)).

The six-factor-structure with the 23 items for Group 2 indicated an acceptable fit (RMSEA = .07; SRMR = .07;  $\chi^2$ -to-df-ratio ( $df, p$ ) = 2.10 (215,  $<.001$ ); CFI = 0.90). For Group A the data also showed an acceptable fit (RMSEA = .07; SRMR = .06;  $\chi^2$ -to-df-ratio ( $df, p$ ) = 2.12 (215,  $<.001$ ); CFI = 0.89). Likewise, an acceptable fit was given for Group B (RMSEA = .07; SRMR = .06;  $\chi^2$ -to-df-ratio ( $df, p$ ) = 2.28 (215, .01); CFI = 0.90). Consequently, configural invariance was accepted. We additionally tested for metric invariance in accordance with the procedure introduced by [Byrne \(2010\)](#). For the multiple group comparison of Group 1 and 2 ( $\Delta\chi^2 = 36.63$ ,  $df = 40$ ,  $p = .62$ ) as well as Group A and B ( $\Delta\chi^2 = 43.02$ ,  $df = 40$ ,  $p = .34$ ) metric invariance was maintained. Thus, the results do not only show that the factor structure applies to the different groups but also that the factor loadings for the different groups are equivalent. Hence, H1 and H2 were supported by the data.

Table 1a

Results of Exploratory Factor Analysis (Factor Loadings, Means, Standard Deviations) for Final Need Items in Group 1

Items (starting with "The incident kept me from..." or "Because of the incident I had/have the feeling...") <sup>a</sup>	Factor loading	Mean (SD)
<b>NEED FOR PLEASURE (<math>\alpha = .90</math>)</b>		
...having fun.	.903	2.79 (1.58)
...recovering.	.874	2.85 (1.61)
...feeling free.	.822	2.90 (1.52)
...enjoying my life.	.803	2.55 (1.56)
...spending my time with pleasure.	.600	2.44 (1.53)
<b>NEED FOR ACCEPTANCE (<math>\alpha = .81</math>)</b>		
...that the person(s) do(es) not take me as I am.	.863	3.17 (1.56)
...that the person(s) has/have a bad opinion of me.	.698	3.20 (1.48)
...that the person(s) do(es) not accept me.	.667	3.39 (1.40)
...that the person(s) do(es) not appreciate me for what I do.	.649	3.03 (1.60)
<b>NEED FOR RESPECT (<math>\alpha = .81</math>)</b>		
...that the person(s) do(es) not adhere to the common rules.	.824	3.55 (1.49)
...that the person(s) do(es) not adhere to the norms.	.786	3.54 (1.43)
...that the person(s) do(es) not pay regard to me.	.644	3.86 (1.34)
...that the person(s) do(es) not have respect of me.	.509	3.43 (1.44)
<b>NEED FOR SAFETY (<math>\alpha = .81</math>)</b>		
...that I am still being threatened.	.902	1.53 (1.10)
...that there is still danger stemming from the person(s).	.747	2.21 (1.48)
...that my safety is threatened.	.698	1.74 (1.29)
<b>NEED FOR SELF-EFFICACY (<math>\alpha = .73</math>)</b>		
...that I was not able to prove my abilities.	.720	2.00 (1.39)
...that I am useless.	.626	1.91 (1.33)
...that my achievements are not sufficient.	.603	2.56 (1.49)
...that I do not have a say.	.523	2.72 (1.51)
<b>NEED FOR MEANING (<math>\alpha = .70</math>)</b>		
...that I don't really understand what happened.	.718	2.89 (1.50)
...that I have to rack my brains over why these things happened.	.625	3.74 (1.36)
...that for me questions remain unanswered about what happened.	.589	3.53 (1.47)

Note. Labels and Cronbach's alpha for the identified need factors are given above each group of items. The original German items are presented in Appendix B.

<sup>a</sup>The first introductory phrase was only used for the items of the need for pleasure.

Table 1b

Intercorrelations of Need Factors in Group 1

	Acceptance	Respect	Safety	Self-efficacy	Meaning
Pleasure	.23	.04	.13	.26	.40
Acceptance		.42	.21	.48	.41
Respect			.34	.33	.21
Safety				.13	.14
Self-efficacy					.32

## Testing H3

It was suggested with H3 that the relationship between the severity of transgression and the desire for revenge is mediated by the intensity of need violations experienced by the victimized. The analysis of H3 relies on the precondition that the means in Group A (less severe) and Group B (more severe) are comparable. Hence, we tested for scalar invariance between these two groups, which is a precondition to compare latent means (Cheung & Rensvold, 2002). Only partial scalar invariance can be proven: According to the step-wise analysis of scalar invariance as suggested by Byrne, Shavelson, and Muthén (1989), the intercepts of the need for pleasure ( $\Delta\chi^2 = 10.13$ ,  $df = 4$ ,  $p = .04$ ) and the need for safety ( $\Delta\chi^2 = 22.22$ ,  $df = 10$ ,  $p = .01$ ) were not invariant, whereas the intercepts for the other needs were ( $\Delta\chi^2 = 16.62$ ,  $df = 11$ ,  $p = .12$ ). Accordingly, H3 can clearly be analyzed for the need for acceptance, the need for meaning, the need for self-efficacy and the need for respect, whereas analyses including the needs for pleasure and safety have to be interpreted more carefully.

The analyses of the mediation hypothesis H3 were calculated with the *MEDIATE* tool by Hayes and Preacher (2012). The bivariate correlations of the concepts were suitable for mediation analyses (see Table 2).

Table 2

*Correlations, Means, and Standard Deviations for Variables Included in the Mediation Analyses*

Variables	1	2	3	4	5	6	7	8
1. Subjective severity <sup>a</sup>	-	.18**	.19**	.45**	.23**	.25**	.44**	.25**
2. Desire for revenge		-	.40**	.17**	.17**	.16**	.17**	.46**
3. Need for respect			-	.25**	.43**	.15**	.30**	.38**
4. Need for meaning				-	.33**	.35**	.42**	.17**
5. Need for acceptance					-	.29**	.53**	.24**
6. Need for pleasure						-	.37**	.16**
7. Need for self-efficacy							-	.19**
8. Need for safety								-
<i>M</i>	4.55	2.02	3.58	3.34	3.20	2.70	2.34	1.87
<i>SD</i>	1.06	.86	1.14	1.18	1.20	1.33	1.08	1.10

Note.  $N = 478$ .

<sup>a</sup>Mean of the two items that measured the severity of the experienced transgression.

\*\* $p \leq .01$ .

In addition, we found significant effects of the severity of the experienced conflict (low vs. high) on the mean ratings of the need violations (pleasure:  $F(1, 476) = 34.60$ ; acceptance:  $F(1, 476) = 25.95$ ; meaning:  $F(1, 476) = 61.42$ ; self-efficacy:  $F(1, 476) = 96.15$ ; safety:  $F(1, 476) = 32.07$ ; respect:  $F(1, 476) = 8.09$ ; all  $p$ 's < .01). Thus, the mean rating for each violated need category was higher in the case of less severe than in the case of high severe conflicts. The means are displayed in Table 3.

First of all, a mediation analysis showed that the severity of the transgression affected the need for respect ( $B = .20$ ,  $p < .01$ ), with the latter affecting the desire for revenge ( $B = .29$ ,  $p < .01$ ). The indirect effect of the severity of the transgression on the desire for revenge ( $B = .06$ ) supports considering the need for respect as a mediator, because the 95% CI did not include 0 (.03, .09). The same applies to all other need categories when tested separately (see Table 4). Yet, the scalar invariance test calls for cautious interpretation of the findings regarding the needs for pleasure and safety. We also wanted to take into account the dependency of the needs as potential mediator variables. Thus, we also calculated the mediation analysis with the mediation PROCESS tool (Hayes,

Table 3

*Means and Standard Deviations for the Six Needs in the Low and the High Severity Condition*

Need	Low severity Mean (SD)	High severity Mean (SD)
Pleasure	2.38 (1.25)	3.07 (1.32)
Acceptance	2.95 (1.13)	3.49 (1.21)
Meaning	2.97 (1.14)	3.77 (1.07)
Self-efficacy	1.93 (.87)	2.82 (1.10)
Safety	1.62 (.92)	2.17 (1.21)
Respect	3.44 (1.12)	3.74 (1.14)

*Note.*  $N = 478$

in press) that allows to assess multiple mediators at the same time. This analysis revealed that the need for respect is the only need among those for which scalar invariance was given where the indirect effect ( $B = .06$ ) was significant (95% CI [.03, .09]). Accordingly, for the present data set the need for respect is the only independent mediator of the relationship between the severity of the conflict and the desire for revenge (see Table 5). All other need categories only mediated the relationship of interest when their dependency was disregarded (see Table 4).

Table 4

*Direct and Indirect Effects of the Severity of the Transgression and the Desire for Revenge When Testing Each Need Category Separately in Mediation Analyses*

Need	Effect Severity on Need B (p)	Effect Need on Revenge B (p)	Indirect Effect B (95%CI)
Pleasure <sup>a</sup>	.32 (< .01)	.08 (.01)	.03 (.01, .05)
Acceptance	.26 (< .01)	.10 (< .01)	.03 (.01, .05)
Meaning	.50 (< .01)	.08 (.03)	.04 (.01, .08)
Self-efficacy	.44 (< .01)	.09 (.02)	.04 (.01, .08)
Safety <sup>a</sup>	.25 (< .01)	.35 (< .01)	.09 (.06, .13)
Respect	.20 (< .01)	.29 (< .01)	.06 (.03, .09)

<sup>a</sup>No scalar invariance was given for these needs.

Table 5

*Direct and Indirect Effects of the Severity of the Transgression and the Desire for Revenge When Testing the Need Categories<sup>a</sup> Simultaneously in a Mediation Analysis*

Need	Effect Severity on Need B (p)	Effect Need on Revenge B (p)	Indirect Effect B (95%CI)
Acceptance	.26 (< .01)	-.03 (.48)	-.01 (-.03, .01)
Meaning	.50 (< .01)	.03 (.47)	.01 (-.02, .05)
Self-efficacy	.44 (< .01)	.02 (.65)	.01 (-.03, .04)
Respect	.20 (< .01)	.29 (< .01)	.06 (0.3, .09)

<sup>a</sup>for which scalar invariance was given

## Discussion

The present analysis suggests six need categories that are violated following the experience of an interpersonal conflict from the perspective of the person who felt inferior or viewed her-/himself as a victim. Exploratory factor analysis revealed one need category with four items that can be labeled *need for respect*. A second factor that was labeled *need for meaning* encompasses three items. A further factor includes four items and can be interpreted as a *need for acceptance*. Another factor can be described as *need for pleasure* and includes five items. Four items comprise a factor labeled as *need for self-efficacy*. Last but not least, there is a factor with three items that we have called *need for safety*. Confirmatory factor analyses showed that these needs replicated not only across two random sub-samples but also across two samples with people who had experienced either conflicts of higher or lower severity. The applied cross-validation procedure for the random groups as well as groups that had experienced conflicts of different severity supports the robustness of the instrument.

We had taken into account five major need theories (Maslow, 1954/1970; Max-Neef et al., 1991; Murray, 1949; Obrecht, 2005; Schwartz, 1992) to develop our questionnaire. None of the suggested category systems is replicated as such – i.e., in number and content – by our data. The same applies to the three suggestions for need categories explicitly for victims (Frijda, 1994; Shnabel & Nadler, 2008; Tedeschi & Nesler, 1993, pp. 15-16) that we had included in the survey. However, interestingly, the categorization of the six needs revealed in the present empirical analysis is similar to a set of needs that Staub (2003) has focused on in his theoretical work on the interconnection of need violation and interpersonal as well as intergroup conflict. Staub (2003) emphasizes a need for safety, a need for comprehension of reality (cf. need for meaning<sup>iv</sup>), and a need for positive connection to others (cf. need for acceptance). Staub's (2003) framing of the needs for a positive identity and effectiveness can, taken together, be interpreted as what we call the need for self-efficacy, because the items of this scale address both effectiveness and a positive identity (see Table 1a). The identified need for pleasure resembles the need for autonomy, which was also introduced by Staub (2003). Thus, our results offer first empirical findings regarding Staub's (2003) theoretical categorization. In addition, our data suggested a need for respect, which Staub (2003) did not explicitly name. Yet, Janoff-Bulman and Werther (2008), while not directly referring to a "need for respect," state that individuals and groups long for respect, and they suggest that this may be an important key to reconciliation.

Our study further supports the hypothesis that the relationship between the severity of transgression and the desire for revenge is mediated by each of the need categories extracted in the study when analyzed separately. The mediation analyses of the categories need for pleasure and safety have to be interpreted with caution though, because no scalar invariance was found for these two categories when comparing the two groups that had either experienced a high or a low severe transgression. Moreover, by means of an analysis that took into account the dependency of the potential mediator variables for which scalar invariance was given, respect was found to be the only independent mediator variable. Yet, the results of the mediation analyses of all need categories (except for the categories pleasure and safety) allow for the interpretation that the violation of these needs on part of the victimized can – at least to some extent – explain the relationship between the experienced severity of transgression and the desire for revenge. This shows that knowing which needs have been violated and to what extent can be relevant for the resolution of interpersonal conflict. This is in line with the literature suggesting that the fulfillment of basic needs can contribute to positive relations and reconciliation (Shnabel & Nadler, 2008; Staub, 2003). Whether or not addressing the extracted violated needs in the aftermath of interpersonal conflict indeed contributes to reconciliation could be studied by means of analyzing the effects of interventions regarding the violated needs. As respect seems to be particularly important, future studies should focus on this need first.

Nevertheless, the results of the present study have to be critically discussed. First of all, some concern about the construct validity of the study can be voiced. Since the participants answered the items in regard to an interpersonal conflict that happened some time in the past, the answers to the items are possibly confounded with later experiences, for example with the person(s) involved in the conflict or with the participants' coping strategies. However, to reduce this limitation, participants had been asked to reply to the items as if the conflict had just taken place. Another methodological shortcoming that concerns the exploratory factor analyses should also be mentioned. It is critical which items are included in the original questionnaire, because of course they influence the results of the factor analyses (see [Fabrigar, Wegener, MacCallum, & Strahan, 1999](#)). Even though we did include items from common need categories, it could be the case that the results would have been different if other need items had been included in the original questionnaire. Thus, the findings should be supported by future studies that rely on qualitative analyses. With such qualitative analyses the needs of victims after interpersonal conflict could be identified based on the interpretation of answers to open-ended questions. Those interested in taking our research a step further might also think about measuring the severity of the transgression with other items than the two we have used, as the correlation among these items was only moderate. Last but not least, the issue of fatigue effects is a potential shortcoming of the study's design. The questionnaire was quite long with its 109 items on violated needs. Therefore, we cannot rule out whether all items of the questionnaire have been answered in the same thorough manner.

Additionally, the sample and the question whether the results can be generalized have to be critically discussed. As it is often the case in social psychological research, the sample was not a representative one, especially because it consisted mostly of people with high levels of education. It is also questionable if the results apply to people who are officially declared "victims of crime." Our participants had merely been asked to report on an interpersonal conflict in which they felt inferior or as the victim, without external validation of their perception. Probably only very few of the reported situations could possibly be defined as a crime. Yet, we found that the six need categories applied not only to conflicts of lower but to those of higher severity, too. It is also important to note that the perpetrator-victim-dichotomy suggested in the present paper obviously is often an oversimplification of describing a conflict history.

Regarding the question of the generalization of the results it also has to be kept in mind that the sample was constricted to German-speaking participants. Thus, it can be questioned whether the extracted need categories apply to other linguistic groups and cultures. Previous research suggests that needs can be considered universal insofar that they apply across contexts ([Maslow, 1954/1970](#), p. 54; [Staub, 2003](#)). Indeed, [Schwartz \(1992\)](#) offers empirical support that groups of needs reoccur across cultures. However, it is important to differentiate between satisfiers of needs (i.e., shelter to satisfy a need for subsistence), which may differ across cultures, and basic needs (i.e., the need for subsistence as such), which might be consistent across cultures ([Max-Neef et al., 1991](#), pp. 16-18). In addition, the importance of needs might also vary across cultures (e.g., [Guan et al., 2009](#); [Schwartz, 1992](#)). Therefore, we recommend that the extent to which the extracted six need categories can be generalized to different cultures and contexts has to be addressed by further empirical research.

In conclusion, we suggest that the six identified need categories can play a crucial role for restoring interpersonal relationships after conflict. Nevertheless, we want to encourage further research that replicates our findings with different methods and in different samples. These studies should test the reliability of the developed measures (see [Table 1a](#)) as well as the practical relevance of the six needs for the resolution of interpersonal conflict. An interesting setting would be the practice of interpersonal mediation, for example testing whether addressing the

six violated needs increases the success of the mediation's outcome. Further empirical research that confirms or challenges our findings is very important, because many need categorizations already exist based on theoretical suggestions without having further been validated empirically (see [Obrecht, 2005](#)).

## Notes

- i) The participants were asked to name the highest degree they had earned (string-variable).
- ii) The need for aggression mentioned by [Murray \(1949, pp. 80-83\)](#) was not operationalized due to the overlap with the dependent variable desire for revenge. Also, the viscerogenic needs were not considered in as much detail as by [Murray \(1949, p. 77\)](#), because categories such as lactation, urination or defecation were not considered relevant for the aim of our study. We only referred to the physical needs suggested by [Maslow \(1970\)](#) and [Obrecht \(2005\)](#).
- iii) 39 (8,88%) of the conflicts could not be coded due to a lack of information. No rest-category was needed because the existing codes captured all statements containing sufficient information for coding.
- iv) [Janoff-Bulman \(1992\)](#) elaborates that for victimized people "motivated cognitive strategies" (p. 117) can be observed "that facilitate the coping process by better enabling victims to reformulate a view of reality that can account for the victimization" (p. 117). One of these cognitive strategies is described by [Janoff-Bulman \(1992\)](#) as 'meaning making' (p. 118), which refers to a re-evaluation of the experienced transgression in terms of possible benefits and purposes (pp. 132-139). [Janoff-Bulman \(1992\)](#) is not explicitly referring to a need for meaning, however she describes the cognitive strategies as a part of a motivational process. Thus, her work can be considered as further theoretical support for the extracted "need for meaning."

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## Competing Interests

The authors have declared that no competing interests exist.

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## Appendices

### Appendix A. A Priori Categorization of the 109 Need Items Applying Verbal Descriptors of the Items

#### Self-worth (9 items)

- ... that my self-esteem is crushed. (*self-worth/self-esteem*: e.g., Frijda, 1994; Lazare, 2004, p. 45)
- ... that my reputation has been damaged. (*self-worth/self-esteem*: e.g., Frijda, 1994; Lazare, 2004, p. 45; *achievement*: Schwartz et al., 2001, PVQ)
- ... that the reputation of the group, to which I feel connected to, has been harmed. (*social identity*: Tedeschi & Nesler, 1993, pp. 15-16)
- ... that the person(s) has/have a bad opinion of me. (*self-worth*: Maslow, 1954/1970, pp.15-23, in accordance with Arzberger et al. 1979, pp. 18,28; *social recognition*: Murray, 1949, pp. 80-83 in accordance with (i.a.w. in the following) the D-PRF by Stumpf et al., 1985)
- ... that the person(s) isn't /aren't able to recognize what I am able to. (*self-worth*: Maslow, 1954/1970, i.a.w. Arzberger et al., 1979, pp. 18,28)
- ... that I am less unique. (*contrariance*: Murray, 1949, pp. 80-83; *distinctiveness*: Obrecht, 2005)
- ... that my dignity has been violated. (*dignity*: e.g., Lazare, 2004, p. 45; Ren & Gray, 2009; Robbenolt, 2008, p. 205)
- ... that I cannot keep going as long as others. (*self-worth*: e.g., Frijda, 1994)
- ... that I am useless. (*self-worth*: e.g., Frijda, 1994)

#### Dominance (10 items)

- ... that the person(s) do(es) not have respect of me. (*power*: Lazare, 2004, pp. 45-46; *power*: Schwartz, 2003, PVQ-21)
- ... that the situation is out of my reach. (*power*: e.g., Lazare, 2004, pp. 45-46)
- ... that I do not have a say. (*empowerment*: Shnabel & Nadler, 2008; *dominance*: Murray, 1949, pp. 80-83, i.a.w. the D-PRF by Stumpf et al., 1985)
- ... that I do not have sufficient control over others. (*empowerment*: Shnabel & Nadler, 2008; *security*: Schwartz et al., 2001, PVQ)
- ... that I do not have power. (*empowerment*: Shnabel & Nadler, 2008; *social recognition*: Obrecht, 2005)
- ... that I do not have an influence on the person(s). (*empowerment*: Shnabel & Nadler, 2008; *social recognition*: Obrecht, 2005; *dominance*: Murray, 1949, pp. 80-83, i.a.w. D-PRF by Stumpf et al., 1985)
- ... that an imbalance of advantages and disadvantages has occurred between me and the other(s). (*re-equilibration of power*: Frijda, 1994, pp. 281-282; *need for justice*: Obrecht, 2005)
- ... to be defeated. (*counteraction*: Murray, 1949, pp. 80-83)
- ... that I have suffered myself, but not the person(s) who has/have harmed me. (*re-equilibration of gains and losses*: Frijda, 1994, pp. 281-282; *need for justice*: Obrecht, 2005)
- ...that not all humans are treated equally. (*universalism*: Schwartz, 2003, PVQ-21)

#### Acceptance (8 items)

- ...that I am not taken seriously as a human being. (*treated with sincerity*: e.g., Robbenolt, 2008, p. 206; *succorance*: Murray, 1949, pp. 80-83, i.a.w. D-PRF by Stumpf et al., 1985)
- ...that the person(s) do(es) not pay regard to me. (*treated with sincerity*: e.g., Robbenolt, 2008, p. 206)

...that the person(s) do(es) not accept me. (*acceptance*: Ren & Gray, 2009)

...that the person(s) do(es) not take me as I am. (*acceptance*: Ren & Gray, 2009)

...that the person(s) do(es) not treat me equitably. (*acceptance*: Ren & Gray, 2009)

...that the person(s) challenge(s) my culture. (*identity*: Max-Neef et al., 1991, p. 33)

...that the person(s) question(s) my values. (*identity*: Max-Neef et al., 1991, p. 33)

...that the person(s) assault(s) my identity. (*identity*: Max-Neef et al., 1991, p. 33; *social identity*: Tedeschi & Nesler, 1993, pp. 15-16)

#### Blamelessness (5 items)

...that I behaved wrongly in the situation. (*no self-blame*: e.g., Lazare, 2004, pp. 58-59; Smith, 2008, p. 36)

...that I am humiliated. (*infavoidance/blaimavoidance*: Murray, 1949, pp. 80-83)

...that I am ashamed. (*no self-blame*: e.g., Lazare, 2004, pp. 58-59; Smith, 2008, p. 36)

...that I have to defend my innocence. (*defendance/blaimavoidance*: Murray, 1949, pp. 80-83)

...that I must feel guilty. (*no self-blame*: e.g., Lazare, 2004, pp. 58-59; Smith, 2008, p. 36)

#### Affection (4 items)

...that the person(s) reject(s) me. (*affection*: Max-Neef et al., 1991, p. 32; *affection*: Ren & Gray, 2009)

...that the person(s) do(es) not seem to care what happens to me. (*affection*: Max-Neef et al., 1991, p. 32; *affection*: Ren & Gray, 2009)

...that the person(s) do(es) not support me. (*affection*: Max-Neef et al., 1991, p. 32; *affection*: Ren & Grey, 2009)

...that the person(s) do(es) not like me. (*affection*: Maslow, 1954/1970, i.a.w. Arzberger et al., 1979, pp. 18,28)

#### Social Belonging (3 items)

...that my membership in our collective is questioned. (*group membership*: Ren & Gray, 2009; *membership*: Obrecht, 2005; *affiliation*: Murray, 1949, pp. 80-83, i.a.w. D-PRF by Stumpf et al., 1985)

...that nobody is there to help me in case of distress. (*protection*: Max-Neef et al., 1991, p.32; *succorance*: Murray, 1949, pp. 80-83, i.a.w. D-PRF by Stumpf et al., 1985)

...that I am alone. (*need for love*: Obrecht, 2005; *affiliation*: Murray, 1949, pp. 80-83, i.a.w. D-PRF by Stumpf et al., 1985)

#### Achievement (5 items)<sup>a</sup>

...that the person(s) do(es) not appreciate me for what I do.

...that I am not good enough.

...that my achievements are not sufficient.

...that I was not able to prove my abilities.

...that I am not determined enough.

<sup>a</sup>All items base on: *achievement*: Schwartz, 2003, PVQ-21; *social recognition*: Murray, 1949, pp. 80-83, i.a.w. D-PRF by Stumpf et al., 1985; *achievement*: Murray, 1949, pp. 80-83, i.a.w. D-PRF by Stumpf et al., 1985; *need for recognition*: Maslow, 1954/1970, i.a.w. Arzberger et al., 1979, pp. 18,28

#### Predictability (9 items)

...that the person(s) do(es) not adhere to the common rules. (*conformity*: Schwartz, 2003, PVQ-21)

...that the person(s) do(es) not adhere to the norms. (*control*: Obrecht, 2005)

...that I cannot rely on anyone anymore. (*trust*: e.g., Strang et al., 2006)

...that I cannot trust the person(s) anymore. (*trust*: e.g., Strang et al., 2006)

...that I cannot further rely on the goodness in humans. (*benevolence*: Schwartz et al., 2001, PVQ)

...that I cannot predict the behavior of the person(s) is not predictable. (*predictability*: e.g., Lazare, 2004, p. 80; Smith, 2008, p. 80)

...that a lot of things happen that I cannot predict. (*predictability*: e.g., Lazare, 2004, p. 80; Smith, 2008, p. 80; *need for control*: Obrecht, 2005)

...that I don't really understand what happened. (*record*: e.g., Smith, 2008, p. 28-29; Lazare, 2004, p. 119; *need for information relevant for orientation and action*: Obrecht, 2005)

...that for me questions remain unanswered about what happened. (*record*: e.g., Smith, 2008, p. 28-29; Lazare, 2004, p. 119; *need for information relevant for orientation and action*: Obrecht, 2005)

#### Safety (8 items)

...that my safety is threatened. (*security*: Schwartz, 2003, PVQ-21; *protection*: Max-Neef et al., 1991, p. 32; *safety*: e.g., Lazare, 2004, p. 59, Ren & Gray, 2009)

...to have been threatened by death. (e.g., Lazare, 2004, p. 59, Ren & Gray, 2009)

...that there is still danger stemming from the person(s). (e.g., Lazare, 2004, p. 59, Ren & Gray, 2009)

...that I am not sufficiently protected against criminality. (*need for safety*: Maslow, 1954/1970, i.a.w. Arzberger et al., 1979, pp. 18, 28)

...that my financial hedging is endangered. (*security*: Maslow, 1954/1970, i.a.w. Arzberger et al. 1979, pp. 18,28; *power*: Schwartz, 2003, PVQ-21; *acquisition*: Murray, 1949, pp. 80-83)

...that my belongings were damaged. (*material safety*: Tedeschi & Nesler, 1993, pp. 15-16)

...that my belongings are gone. (*material safety*: Tedeschi & Nesler, 1993, pp. 15-16)

...that I am still being threatened. (*protection of further threat*: Frijda, 1994)

#### Benevolence (4 items)

...helping others. (*social need*: Maslow, 1954/1970, i.a.w. Porter, 1961; *benevolence*: Schwartz, 2003, PVQ-21; *need to help others*: Obrecht, 2005)

...standing up for people that are close to me. (*benevolence*: Schwartz, 2003, PVQ-21)

...putting myself in the position of others. (*similance*: Murray, 1949, pp. 80-83)

...supporting the cause of the powerless in society. (*universalism*: Schwartz et al., 2001, PVQ; *nurturance*: Murray, 1949, pp. 80-83, i.a.w. D-PRF Stumpf et al., 1985)

#### Cognitive Stimulation (4 items)

...experiencing something exciting. (*abasement/harmavoidance*: Murray, 1949, pp. 80-83, i.a.w. Stumpf et al., 1985, D-PRF; *stimulation*: Schwartz, 2003, PVQ-21)

...experiencing something new (*stimulation*: Schwartz, 2003, PVQ-21; *need for variety*: Obrecht, 2005)

...being spontaneous. (*leisure*: Max-Neef et al., 1991, p. 32)

...learning something new. *understanding/cognizance*: Murray, 1949, pp. 80-83, i.a.w. D-PRF by Stumpf et al., 1985; *understanding*: Max-Neef et al., 1991, p. 32)

**Autonomy (10 items)**

- ...deciding on things that concern me. (*need for self-fulfillment*: Arzberger, et al. 1979, pp. 18,28; *protection*: Max-Neef et al., 1991, p. 32)
- ...conducting my actions. (*autonomy*: Obrecht, 2005)
- ...exercising my rights. (*need to have rights*: Tedeschi & Nesler, 1993, pp. 15-16; *participation*: Max-Neef et al., 1991, p. 32)
- ...being independent of the person(s). (*self-direction*: Schwartz, 1992, PVQ, PVQ-21; *autonomy*: Murray, 1949, pp. 80-83; *autonomy*: Obrecht, 2005)
- ...deploying and developing my abilities. (*actualization*: Arzberger et al., 1979, pp. 18,28; *competence*: Obrecht, 2005)
- ...being creative and having original ideas. (*self-direction*: Schwartz, 2003, PVQ, PVQ-21; *creation*: Max-Neef et al., 1991, p.32)
- ...relying on myself. (*self-direction*: Schwartz et al., 2001, PVQ; Schwartz, 2003, PVQ-21)
- ...pursuing my dreams and hopes. (*subjective meaning*: Obrecht, 2005)
- ...performing my life successfully. (*self-esteem (self-efficacy)*: Frijda, 1994)
- ...feeling free. (*freedom*: Max-Neef et al., 1991, p. 33)

**Health (7 items)**

- ...that my well-being is deteriorated. (*psychological healing*: e.g., Strang et al., 2006; *subsistence*: Max-Neef et al., 1991, p. 32; *physical integrity*: Obrecht, 2005)
- ...that I have to rack my brains over why these things happened. (*psychological healing*: e.g., Strang et al., 2006)
- ...that my health is deteriorated. (*health*: Arzberger et al., 1979, pp. 18,28; *subsistence*: Max-Neef et al., 1991, p. 32)
- ...that as a result I have physical problems. (*physical integrity*: Obrecht, 2005; *absence physical injury*: Tedeschi & Nesler, 1993, pp. 15-16)
- ...that my body was injured. (*absence of physical injury*: Tedeschi & Nesler, 1993, pp. 40-43)
- ...to have to carry around many negative emotions. (*affect regulation*: Frijda, 1994, pp. 281-282)
- ...that my feelings have been hurt. (*affect regulation*: Frijda, 1994, pp. 281-282)

**Tradition/Conformity (10 items)**

- ...appreciating other opinions. (*universalism*: Schwartz, 2003, PVQ-21)
- ...being modest and humble. (*tradition*: Schwartz et al., 2001, PVQ; Schwartz, 2003, PVQ-21)
- ...adhering to customs and traditions. (*tradition*: Schwartz, 1992, PVQ, PVQ-21)
- ...being satisfied with what I have. (*tradition*: Schwartz et al., 2001, PVQ; Schwartz, 2003, PVQ-21; *retention*: Murray, 1949, pp. 80-83)
- ...behaving correctly. (*conformity*: Schwartz, 2003, PVQ-21; *blameavoidance*: Murray, 1949, pp. 80-83)
- ...being involved in my social surroundings. (*participation*: Max-Neef et al., 1991, p.32)
- ...respecting authorities. (*deference*: Murray, 1949, pp. 80-83)
- ...sparing materials. (*conservance*: Murray, 1949, pp. 80-83)
- ...rejecting other people. (*rejection*: Murray, 1949, pp. 80-83)
- ...giving other people helpful answers to their questions. (*exposition*: Murray, 1949, pp. 80-83)

**Recovery/Sexuality (6 items)**

- ...acting out my sexual desires. (*sexual activity*: Obrecht, 2005; *physical needs*: Maslow, 1954/1970, pp. 15-23)
- ...being able to eat and/or drink enough. (*physical needs*: Maslow, 1954/1970, pp. 15-23; *necessary substitute material*: Obrecht, 2005)
- ...recovering. (*regeneration*: Obrecht, 2005; *physical needs*: Maslow, 1954/1970, pp. 15-23)
- ...relaxing. (*regeneration*: Obrecht, 2005; *physical needs*: Maslow, 1954/1970, pp. 15-23)
- ...fully apprehending my environment. (*sensory needs*: Obrecht, 2005)
- ...regarding something with enjoyment. (*need for aesthetic experience*: Obrecht, 2005)

**Leisure (4 items)**

- ...enjoying my life. (*hedonism*: Schwartz, 2003, PVQ-21)
- ...having fun. (*hedonism*: Schwartz, 2003, PVQ-21; *play*: Murray, 1949, pp. 80-83, i.a.w. D-PRF by Stumpf et al., 1985)
- ...taking center stage. (*exhibition*: Murray, 1949, pp. 80-83, i.a.w. D-PRF by Stumpf et al., 1985)
- ...spending my time with pleasure. (*leisure*: Max-Neef et al., 1991, p. 32)

**Order (3 items)**

- ...being tidy. (*order*: Murray, 1949, pp. 80-83, i.a.w. D-PRF by Stumpf et al., 1985)
- ...organizing my everyday life. (*construction*: Murray, 1949, pp. 80-83)
- ...making anticipatory plans. (*construction*: Murray, 1949, pp. 80-83)

*Note.* The original items are phrased in German and have been translated for this article. The items either start with “Because of the incident I had/have the feeling...” or “The incident kept me from...” (which introductory phrase was given in front of each item can be identified by grammatical coherence of the sentence).

**Appendix B. Original Version of the Translated Items Displayed in Table 1a**

**Items** (beginnend mit “Der Vorfall hat mich daran gehindert, ...” oder “Der Vorfall hat dazu geführt, dass ich das Gefühl hatte, ...”)

**BEDÜRFNIS NACH GENUSS**

1. ...Spaß zu haben.
2. ...mich zu erholen.
3. ...mich frei zu fühlen.
4. ...mein Leben zu genießen.
5. ...mit Freude meine Zeit zu verbringen.

**BEDÜRFNIS NACH AKZEPTANZ**

6. ...dass die Person(en) mich nicht so annimmt/annehmen wie ich bin.
7. ...dass die Person(en) eine schlechte Meinung von mir hat/haben.
8. ...dass die Person(en) mich nicht akzeptiert/akzeptieren.
9. ...dass die Person(en) mich für das, was ich mache, nicht schätzt/schätzen.

**BEDÜRFNIS NACH RESPEKT**

10. ...dass die Person(en) sich nicht an die gemeinsamen Regeln hält/halten.
11. ...dass die Person(en) sich nicht an die Normen hält/halten.
12. ...dass die Person(en) keine Rücksicht auf mich nimmt/nehmen.
13. ...dass die Person(en) keinen Respekt vor mir hat/haben.

**BEDÜRFNIS NACH SICHERHEIT**

14. ...weiterhin bedroht zu sein.
15. ...dass von den Person(en) weiterhin Gefahr ausgeht.
16. ...dass meine Sicherheit bedroht ist.

**BEDÜRFNIS NACH SELBST-WIRKSAMKEIT**

17. ...meine Fähigkeiten einzusetzen.
18. ...dass ich nutzlos bin.
19. ...dass meine Leistungen nicht ausreichend sind.
20. ...dass ich nichts zu sagen habe.

**BEDÜRFNIS ZU VERSTEHEN**

21. ...nicht wirklich zu verstehen, was passiert ist.
22. ...meinen Kopf darüber zerbrechen zu müssen, warum diese Dinge passiert sind.
23. ...offene Fragen zu haben zu dem, was passiert ist.