5.7.   Practical Consequences

When looking at the results of the present study as a whole, it seems that the significance of conversations for processing crises has so far not been sufficiently recognized. Not only the individual case presentations in the qualitative study (Chapter 3) show this, but also the data that could be gained through the newly developed Factors of CISM questionnaires (FACIQ) in the study's quantitative part.

Many consequences can be deduced for further praxis. In a first step, the questionnaire's options for further development will be thematized.

5.7.1.   Further Development of the FACIQ: Existing Subtests

In evaluating the data, it was somewhat surprising to note that many of the item complexes that were originally constructed as subtests could not be maintained statistically. Seen retrospectively, this is a result not only of the search within the research area, but also of the lack of experience on the part of those who constructed the questionnaire. Accordingly, an essential element of further FACIQ development will be the transfer of survey results that can be evaluated only in a qualitative way (here so called "threads"), into statistically reliable thematic complexes (usually called "subtests"). In addition, new and other subtests from the management or scholarly perspective will be of interest.

Subtest 01 "knowledge about CISM" already indicates in itself a very good inner consistency with its four items that have correlation values between $.311 \leq \rho \geq .597$ and a Cronbach alpha of .750. Items 01) and 47) ask for self-assessment, items 19) and 41) for the assessment of others regarding knowledge about CISM. Only item 56) asks objectively about knowledge of CISM – and consequently drops out of the spectrum of significant correlations.[512] It will have to be discussed whether further assessments - or actual knowledge - of CISM should be surveyed. When the latter is emphasized, items such as e.g. "*CISM is working according to a defined discussion guide*", or "*There are several crisis interventions according to CISM. Each fits to a different time interval from the incident*", or (the inverted formulation respectively!): "*CISM is suitable for accompanying colleagues in family crises*", or "*CISM is a kind of psychotherapeutic measure*", are to be integrated in a new subtest.

Subtest 02 with currently six items seems to contain more than necessary. It is suggested that it

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[512] Pearson correlations for the other items in subtest 01) range between $.090 \leq \rho \geq .184$.

be shortened by two items. From the point of view of contents, item 21) would be appropriate because of the similarity in the meaning of trustworthiness, confidentiality and reticence (cf. subtest 03), as well as item 44) with the weakest mean of Pearson coefficients. It is to be expected that the Cronbach alpha of subtest 02 with its current .904 could thus be increased yet more.

Subtest 03 in the version presented here with four items seems still to be operational without any change. It fits not only in its scope and correlation values[513], but in spite of two inverted formulations, also comes to stable results for the central thematic area of confidentiality.

In a reworked form, subtest 04 would be shortened (like subtest 02) from six to four items. Here as well there is a reason as regards content to remove one item[514], since in its general formulation, it does not sufficiently come to a point regarding the CISM method. In addition, a suggestion is to remove the item with the weakest correlation mean[515] from subtest 04). The current Cronbach alpha of .777 would thereby very probably be further improved.

5.7.2 Further Development of the FACIQ: Threads to Subtests

Thread 05 is the most important example in the FACIQ of the necessary reworking of the current type of survey to a reliable test tool: from "Paper with Questions" to "Questionnaire" (Kallus, 2010: 23). The current items formulated alternatively for twelve different points of contact as regards the search for a conversation after an experienced incident must be formulated redundantly in the future so that the items can mutually support one another. With remaining twelve contact persons for this future thematic area alone, conceived as a subtest with four items each, 48 questions would thus result. Consequently, a choice of relevant points of contact each time will have to be recommended. Possibly in doing so, individual aspects of the presently outlined spectrum[516] will have to be dropped. On the one hand, concrete professional roles (doctor, phychologist, chief pilot, etc.) could be named, or on the other hand, it could be asked regarding specific categories (internal/external, superior/equal rank/experienced etc.)

As one example for item 32) with the question about the family doctor as an adequate first contact after experiencing an incident, along with "*I talk to my doctor about situations, that I find distressing*", also "*I would talk with my family doctor, if I had experienced an incident*" or "*The*

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[513] Between inv. .421 and .668 with the Cronbach alpha of .796.
[514] Item 04) is meant: "Talking to a colleague can be helpful dealing with stressful events."
[515] With reference to item 43) and its provocative question: "CISM is the invention of psychologists. There is no actual need for it." - Average mean correlation values for item 04) $\rho\overline{x}= .216$; item 23) $\rho\overline{x}= .374$; item 43)inv. $\rho\overline{x}= .321$; item 51) $\rho\overline{x}= .357$; item 57) $\rho\overline{x}= .465$.
[516] Cf. Chapter 5.4.2.1.: professional qualification, hierarchy, relationship, internal/external.

general practicioner is the appropriate person to deal with personal reactions after a

stressful event", or also "*For me, my physician is the first contact, should I be irritated*

after an incident" could be implemented. Appropriate formulations of items must be found for the respective location where FACIQ is used, with the criteria of comprehensibility, clarity, comparability, etc.

The question about the appropriate implementation of a CISM counseling offer as an organization internal to the company or external to it, cannot be answered conclusively with the present items 02), 08), and 52).[517] Perhaps it would already be enough to highlight the point internal/external in the layout of the currently used item formulations in the questionnaire itself. However, possibly they also need to be named more pointedly, e.g.: "*When talking to a CISM-team member after a critical incident, it is important for me that he / she is not an employee of my own company*", or "*A CISM conversation can only be successful if the CISM-team member has no relationship to my employer.*"

The very basic questions in thread 06 about the characteristic of personal experience of control and the need of the basic population questioned, assumes with a renewed use of FACIQ either a scholarly interest or also a practical one in management. Assessments regarding a *sense of self-control* could have consequences on the design of company gatherings, educational programs, etc. If there is no focus on such questions, it would be possible to shorten the FACIQ by the corresponding four items[518].

Thread 07 sums up several thematic areas under the umbrella term resilience; these areas could be thought in other connections as well. Thus aspects of company culture and work surroundings could also be connected with key words such as "efficiency" or "leadership style", while "nationality" e.g. could be situated in a legal frame. In any case, the further development of thread 07 will bring with it the setting up of new subtests, for which new items will have to be formulated.

For some contracting authorities e.g. a differentiation between colleagues with an initial civil or military flight training will be marginal, and thus make item 39) obsolete. For others, precisely this distinction could be of central significance and make an expansion necessary to a subtest of its own. It will have to be asked thereby[519] whether this subtest should be based on self-assessment or on an actual examination of knowledge. Possible item-formulations would be e.g.: "*In case of experiencing a critical incident, I would request personal support*" or "*After experiencing a distressing event, for me it is important to contact the CISM-team*", or "*After having a distressing incident, I would phone the CISM-team during the next days*", or "*A critical incident calls for a*

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[517] Cf. Chapter 5.4.2.1.4.
[518] So here the items 03), 15), 22), and 35).
[519] Similarly to the discussion of subtest 01.

review with CISM". In such a variety of formulations, there would be the need to cross-validate the items in this subtest in a standardized way with the social item, "initial flight training"[520].

Aspects of the company cultural environment[521] as well as national identity[522] would have to be submitted to a similar weighing and consequently sorted out or developed further, whereby it is to be expected that during times of expansion and further internationalization of aviation, the significance of (inter-) national and cultural themes will also increase.

Too little attention is paid to the aspect of perceived support both in the form of the FACIQ introduced here and also in aviation's daily crisis management. The theoretical introduction[523] shows clearly its significance. A further development in a subtest by the same name is therefore urgently needed. It should thereby be noted that the term "flight safety factor"[524] used here is a very complex concept in aviation and needs a "translation" when used outside of this area in its extensive significance. Suggestions for the item formulation could be: "*Support such as CISM provides an important consideration for the risks of professional daily grid*", or "*CISM support is part of the safety concept of an airline*", or "*Feeling supported in everyday business is largely due to the availability of CISM support*". It is necessary thereby to think about the reworking of the two present items 16) and 49), the correlation[525] of which does not seem so far to be viable.

The theme of gender role - represented in thread 8 - has been discussed in part passionately over the past decades from various perspectives. In the FACIQ, it would only be developed into a subtest if e.g. further academic interest were attached to it. But possibly reasons connected with organizational development[526], legal aspects, or personnel leadership demand a more precise gender-specific evaluation. Because of the previously weak correlation of the two items belonging with this, items 25) and 30)[527], their formulations require a corresponding reworking. New items such as e.g. "*Female/Male pilots will often commence with the support of the CISM-team*" and "*Nowadays, CISM is both interesting for male and female pilots*" or inv. (!) "*Male pilots will not use CISM*" or "*CISM is a tool specifically designed for female pilots*", will need to be discussed.

Thread 09 summarizes multiple information interests of the cooperating airline, which from the start were thought of more in the sense of a survey than of loadable tests. To begin with, both the aspects "*CISM-offering active/passive*"[528] and "*duty of care*"[529], as well as "*CISM-Presentations*

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[520] Another possibility would be to survey the items separately according to the social criterion of flight socialization, e.g.: "*Please answer the following question only if you completed a basic military/civil based training.*"

[521] As in items 46) and 55).

[522] As in items 11), 16), and 24).

[523] Cf. Chapter 5.4.2.3.3.

[524] The concept "flight safety factor" is used in item 16).

[525] Correlation item 16) with item 49): $\rho = .232$.

[526] E.g. within the context of fixed legal gender equality mandates.

[527] Correlation item 25) with item 30): $\rho = .091$, cf. Chapter 5.4.3.4.

[528] Cf. items 10), 42)inv. and 53), Chapter 5.4.2.5.1.

[529] Cf. items 18), 33) and 50), Chapter 5.4.2.5.2. Here the formulation of the responsibility for the wellbeing of the crew after an incident (!) needs to be made more precise. A question asked in general (as at present) loses sight of the study's focus and brings CISM into competition with other aviation roles, which is not intended.

comprehensible"[530] will therefore not need further reworking. Depending on the various client interests, they can be reformulated and adapted accordingly in the sense of a survey.

This is different for special interest "alternate settings". Here, the originally specific client interest certainly has the potential for generalization, since it touches the fundamental question of CISM mechanisms: What is decisively different in CISM to other conversation settings? Couldn't other alternative settings be similarly effective and successful? In comparing the overview of the counseling processes in the studie´s qualitative part in the case reports[531], some setting factors in fact become visible that are valid both for the alternative operational debriefing and for the CISM debriefing studied here: Determining of contract[532], time design[533], possibility of delegation[534], subjective experience of relief[535], and attributing options[536]. It should be checked to what extent the conscious framing of a CISM conversation about the personal state of mind, the view of a sensitized person for loading situations, and the peer aspect as the only criteria contribute toward the CISM tool's success in providing relief. Concretely, it could be asked more precisely in items 07) and 17) whether a psycho-hygienic/relieving effect is attributed to the operational debriefing, e.g. "*All in all, the CISM debriefing has a more relieving effect than the operational debriefing*", or "*After a critical incident, I would rely more on a CISM debriefing than on an operational debriefing in order to handle an emotional strain.*"

In addition, item 06) could be cleaned of the description of the professionally external setting around the drinks "coffee or beer" that influence the stress hormone. Possibly it would have to be asked directly in opposition to this: "*Being upset, there are several possibilities for coping. In general I think, such feelings will be better discussed in a CISM debriefing than outside of work.*"

Further surveys could improve both the knowledge of the request and of the reception of CISM and the further development of the tools in the questionnaire, so that in the future more than four valid subtests and a thematic spectrum understood in a more differentiated way would be available in connection with CISM. The affordability of both the scope and the evaluation as compared to the desired gain in information would thereby be weighed anew.

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[530] Cf. item 31), Chapter 5.4.2.5.4.
[531] Cf. Chapter 3.
[532] Cf. 4.1.4.
[533] Cf. 4.1.5.
[534] Cf. 4.1.6.
[535] Cf. 4.1.7.
[536] Cf. 4.1.8.

5.7.3.　　Further Development of the FACIQ: New Subtests

Although in general the "implementation of debriefing" in a less reflected form has probably existed for centuries, and its psycho-hygienic effect has been known more or less for just as long[537], its significance seems to be greatly underestimated also in modern communication. This is probably true for private relationships just as much as for the business communication, which is the focus here. Even a fourty-year history of the Critical Incident Stress Management in the tradition of Jeffrey T. Mitchell has only partially been able to change anything there. And until now, it has not been seen that meaningfully designed debriefings are definitely possible, also when not at the level of something life-threatening - just as in the qualitative part of the present study, the reason for counseling because of a failed check is to be situated not as a physical threat to life. It would therefore not belong within the original spectrum of the Critical Incident Stress Debriefings[538], but ultimately it proved nevertheless to be a valid indication for being evaluated in the research area. A reason for the institutionalization of standardized debriefing formats could e.g. be subjectively relevant situations (srs)[539] that would be discussed routinely with a fixed rhythm in organizations, so that the threshold would be tangibly lowered not only through the peer aspect, but also through its ritualized procedure.

Then the subtests would possibly be of interest; these would include thematically immanent educational contents (cf. chapter 5.8.), connections between a company's development and the CISM offer, etc. Along with elements relevant to the praxis, very basic questions regarding the interaction between the individual employee's perspective and that of the institutional employer could thereby be a topic, for example the relationship between relational aspects and factual ones[540], or the level of individual willingness to risk something[541].

5.8.　　　　View to further Possibilities of Debriefing Development

"Debriefing is underestimated." Such a rating in this study's concluding discussion can be reached both based on the individual case analyses and on the results gained in the study's survey section because of its psycho-social quality, its ensuring quality, and its deepening of the learning

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[537] Cf. e.g. the biblical story of the "Walk to Emmaus" (Lk 24:13-35) during which the "survivors moarn the death of the person who gave them ideas". The course of the conversation in the biblical narrative and the structure of the CISM debriefings definitely have similarities (Johanns, 2004).

[538] Cf. the case reports of Albert Tissander (Chapter 3.5.2.), Oswald Boelcke (Chapter 3.5.3.), Mathilde Missant (Chapter 3.5.4.), Artur Krebs (Chapter 3.5.5.), Stefan Maxim (Chapter 3.5.6.), Alberto Santos (Chapter 3.5.7.), and Eduard Rickenbacher (Chapter 3.5.8.).

[539] Subjectively relevant situations (srs) are subjectively significant situations, that have not only negative but also positive emotional quality for the person experiencing them (vgl. APA, Dictionary of Psychology).

[540] Cf. the extensively discussed thesis in the 1970s, according to which the relational level determines the factual level (cf. Watzlawick, Beavin, & Jackson, 2003: 27-29).

[541] Cf. the proverbial apostrophobization in "The one who sleeps doesn't sin" (from the Latin, "*Qui dormit non peccat*", Cicero, Epistulae ad faliliares), or "The one who doesn't do anything, doesn't do anything wrong" (from the Hungarian: "*Csak az nem követ el hibát, aki nem dolgozik*", literally: "Only that one makes no mistakes who doesn't work.")

process. Nevertheless, after an intense examination, it has to be added that a "debriefing" of the sufficiently discussed setting here requires some completion so as to be able to unfold its full effect.

Of course, both as a reflex and also rightly, questions regarding the relation between investment and yield will be asked on the business side, and the known difficulty of making an image of soft skills and facts in mathematical language is given a new edition in this thematic sector as well[542]. With every understanding for the company's economic necessities, let it be permitted to query here the rationality myth that imputes a "permanently produceable, reliable order…"and in a conspicuous emphasis on rationality "… [reveals] what was staved off: There should not be: disorder, lack of knowledge, insecurity… [and] unconsciousness … The antagonist [without whom mobility would not be possible at all]" is denied. It is interesting thereby that over the past two decades "… emotional intelligence(!), soft skills … etc. …" are increasingly being discussed.[543] One can thereby note an "interesting displacement: Leadership is no longer the 'rational subject', but rather the institution, which through rational proceedings places itself as the supersubject. Then leadership (only still) has the function of compensating for the gaps or failure of rational control." (Neuberger, 2002: 102f.) The implementation or cooperation with a CISM provider can also be seen and rated in this light. Then the question would be interesting, how the mechanism mentioned can find its expression in business management or accountancy. However, in addition to all these theoretical organizational reflections, it can also be shown in an entirely pragmatic-arithmetical way that - even with a conventional assumption of 16% of persons affected by an incident in the aviation sector - their stress symptoms can be greatly alleviated[544], and for 3.9% of the persons affected, a PTSD development can be averted through a CISM intervention[545]. For this, the cost of the investment[546] is a little less than one fifth of what would have to be estimated as the cost of therapy for persons affected[547]. As described, however, the rationality myth must no longer be maintained here; the relations between cost and use are simply meant to show that the benefit of a CISM implementation can also be expressed in the language of business managemant. The advantages that have been worked out in the areas of work health/health management, stress coping, effects on team cooperation and its productivity, the colleagues' bonding with the company in the sense of a corporate communion, etc. give sufficient reasons to think about the implementations of institutionally anchored debriefing measures.

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[542] Cf. Jung, 2006: 571, with the aspect of employees' health: 627.

[543] Quoted according to Neuberger, 2002: 103. The counterpoint movement of "beautiful failure" as well, during the years after 2014, can be counted as belonging to this dynamic; cf. Scheitern (Hannemann & Nägele, 2014), Schönes Scheitern (Häntzschel & Fengel, 2015); "Schöner Stress" (Glomp, 2015), etc.

[544] So that fitness for daily life and for work can be reached through a person's own strength.

[545] Basic assumptions in this are: 80% of people affected have no mentionable psychological reactions, even without externmal support; with 16% of persons affected by an incident, their stress reactions can be substantially reduced through CISM; and in 3.9% of persons affected, the beginnings of PTSD can be averted through a CISM intervention.

[546] Estimated from experiences so far: The total cost for the aviation sector in the Federal Republic of Germany during the period of 10 years: €482.500,-: fixed costs €145.000,- + training costs €100.500,- + case specific costs €147.000,- + conference costs €90.000,-.

[547] Total savings for the same target group during the same period: €2.646.000,-: short-term illness: €846.000,- + long-term illness €1.800.000,-.

Here, the significance of the experience of persons affected seems more important: that they are able to integrate through CISM contact the living reality of personal dysfunctionality and failure in their own biography. The analyses of the case reports, especially in the chapters "session impact"[548] and "attribution"[549] show this in an impressive way.

5.8.1.   Twin De-Escalation: Cross-School Cooperation

As in many other areas, a diversified market of organizations and "schools" has formed over the past decades (cf. also Butollo, Hagl, & Krüsmann, 2003: 172f.) which quite often has competitive, partly grotesque local or idiomatic characteristics. In view of the present study's results, not only mechanisms based on the ICISF standardized debriefing implementations can be seen; it can also be estimated that comparable ways of proceeding bring comparable results. Cross-method variables such as the debriefer's personality, the time of implementing a debriefing measure, the affected person's subjective experience of loading, and the previous biographical history, etc. have thereby not in any way been considered.

Thus a plea for a kind of "meta-de-escalation" is to be expressed here: Relaxation not only as a substantial task in view of loaded persons affected, but relaxation also in view of institutional rivalries! An accelerated further development seems possible through a de-escalation in "school thinking". Modified forms of debriefing moderation are also meaningful and effective and promise success.

The synopsis presented on the following page makes visible the structural similarity of many forms of debriefing. Based on the method used in this study, according to Mitchell/Everly, it is to be read from the bottom to the top: The basis is the structure in seven steps, at first downward, then upward, of emotional deepening. The table placed over this picks up the ICISF standardization structure (introduction to reentry) in tabular form and shows, rising toward the top, the correspondences and the diverging emphases in alternative forms of structuring. The synopsis makes clear that (with the exception of the Israeli army's HERD program[550]) all debriefing structures keep to similiar schemata that are comparable in their emotional management as well. In this, hardly a form can be found that has not been submitted to scholarly evaluation[551] after it had already reached practical relevance for the accompaniment of persons affected by an incident.

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[548] Cf. the synopsis of the analysis of all counseling results, Chapter 4.1.15.; in detail: Heinz Farmann, Chapter 3.1.5., Artur Krebs, Chapter 3.5.5., Stefan Maxim, Chapter 3.6.5., and Eduard Rickenbacher, Chapter 3.8.5.

[549] Can be recognized in the hyperbolic course of the conversation description "Regulation *Emmotio ↔ Ratio*". Already presented and discussed in Chapter 1.4.2.1. with the key words CISM debriefing and SAFER-R Model.

[550] Cf. Shalev, 1996 in the example of the "Man in combat" project following the Lebanon War at the beginning of the 1990s.

[551] For referral, cf. the respective places.

systematics / classification	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 7a	Step 8
Psychological Debriefing[552] (PD)	Introduction	Fact	Thought	Sensory	. / .	Normalization	Closure	. / .	Follow-up Debriefing
Preventive Intervention[553] (PI)	Contract	Fact	Thought	Emotion	. / .	Information	Rituals	Re-entry	. / .
Group Crisis Intervention (GCI; NOVA[554])	Introduction	Event	Aftermath	. / .	Expectations in Future	Education	Conclusion	. / .	. / .
Multi Stressor Debriefing[555] (MSD)	Welcome	Event	. / .	Feelings and	Reactions	Coping	Termination	. / .	. / .
Critical Event Debriefing[556] (CED;USMil[557])	Introduction	Chronological Reconstruction	. / .	Symptoms and	Reactions	Teaching	Wrap-up	. / .	. / .
Historical Event Reconstruction Debriefing[558] (HERD; IDF[559])	Introduction	Chronological Reconstruction	. / .	. / .	. / .	. / .	. / .	. / .	Publishing
Critical Incident Stress Debriefing (CISM/CISD[560])	*introduction*	*fact*	*thought*	*emotion*	*reaction*	*teaching*	*reentry*	. / .	Follow-up

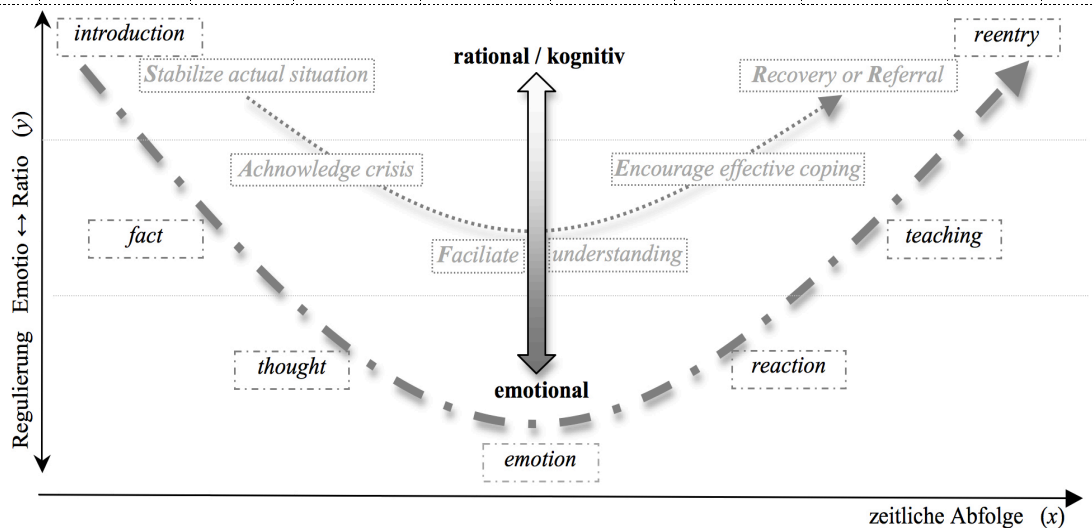*Diagram 94: Structure of Adaption Debriefing Conversation according to Mitchell, 2002: 87*

[552] Vgl. Dyregrov, 2003.
[553] Vgl. Perren-Klingler, 2000b.
[554] National Organisation for Victim assistance, https://www.trynova.org .
[555] Vgl. Armstrong, O'Callahan, & Marmar, 1991.
[556] Vgl. Stokes & Whalen, 2010.
[557] Surgeon General of the United States Army, http://armymedicine.mil .
[558] Vgl. Koshes, Young, & Stokes, 1995.
[559] Historical Department, Israeli Defence Forces, https://www.idf.il .
[560] Standardisiert in ICISF, vgl. https://www.icisf.org, Shalev, 1991.

Table 64: Synopsis Forms of Debriefings

5.8.2. Twin Situational Awareness: Regaining Control

Being able to act appropriately in a situation depends essentially on an adequate perception. Situational awareness is a term often used in aviation; it might also be understood as situational perception, even if the alarm component is thereby tendentially levelled. In its items 33) and 50), the FACIQ brought to light an unexpected indication of a possibly new situation that is to be perceived and rated when, under the aspect "*duty of care for wellbeing*", it called forth the further development of responsibilities in the plane as more than just the captain's role.[561]

"Situational perception" can however also be understood outside of the cockpit as one of the central qualifications that have to do not only with technical issues, but also with economic ones and with relation dynamics. Situational awareness offers a conceptual version, the multiple use of which is also present in the conversation partners in the reconstructive case analyses (Chapter 3) - without exception, all presenters of cases in Chapter 3 offer a transfer of background biographical elements.[562] It can hardly be difficult for a pilot to make the transfer from the relevance of situational awareness as an essential precondition for regaining control in aviation, to its relevance in personal situations as well. With this, an essential access to making use of a CISM offer that is aware of a situation is given.

A critical appreciation probably demands that one ask as to the situational perception of the infiltration of work themes into private life. The question raised by Trompenaars/Hampden-Turner, "*How far do we get involved*?"[563] should not only be answered in a differentiated way from the diversity point of view, but is raised again in the assessment of aviation personnel's coping strategies when faced with the ambivalence of performance capability and the limits of private resources: More than 80% of the persons responding rate the question regarding the involvement of private contacts in professional loading situations positively, 6.3% are undecided, and only 9.7% speak against the involvement of family members[564]. The FACIQ offers an essential indication here in items 26) and 40), not only for the use of the CISM teachings in the debriefing-step 6[565], but also for the differentiated demarcation between CISM and non-CISM themes, together with the corresponding initiative for delegation. In the management area as well, the association through a saying attributed to J.D. Rockefeller, "Friendship based on a deal is better than a deal based on friendship", has long become problematized. Interconnectedness with "health management in companies" (Ulrich & Wülser, 2004, 2015) is obvious. It seems less obvious that

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[561] Cf. Chapter 5.5. thread 05 with reference to Chapter 5.4.2.5.2.

[562] Heinz Farmann in his appeal to religious commitment (cf. Chapter 3.1.3.), Albert Tissander in the description of his personal crisis in meaning and his doubts as to identity (cf. Chapter 3.2.3.), Oswald Boelcke with his description of the level of family obligations (cf. Chapter 3.3.3.), Mathilde Missant with her questions regarding the meaningfulness of personal commitment for others (cf. Chapter 3.4.3.), Artur Krebs in his entanglement in a persistent situation of family conflict and the consequences connected with this for him in his role as father (cf. Chapter 3.5.3.), Stefan Maxim in reference to his present situation of separation in his partnership (cf. Chapter 3.6.1. and 3.6.3.), Alberto Santos in the appeal to his health limitations (cf. Chapter 3.7.1.), and finally Eduard Rickenbacher in the intensification of a conflict with his superiors (cf. Chapter 3.8.1).

[563] Cf. Trompenaars & Hampden-Turner, 1997, 2003: 299.

[564] Cf. Chapter 5.5. thread 05 and Chapter 5.4.2.1.3. decision factor: relationship.

[565] Cf. Chapter 1.4.2.1. and Chapter 5.8.1.

CISM can contribute in an essential way to this. The present study could take first steps toward a proof.

5.8.3.   Forwarding und Cooperation: Courage to Delegate

The links with the most varied disciplines and with alternative counseling formats that have been shown repeatedly indicate the need for cooperation - also with at times unconventional partner organizations. Progress in accompanying persons affected by an incident will only be made if, in spite of visible competition in the counseling market, an appropriate "boundary management" is practiced by all participants. This assumes that both organizational and individual persons involved have an idea of internal identity and external cooperation partners. "Everything … can be called a system, for which the distinction internal and external can be used… [Even if] social systems do not [consist] of concrete persons with a body and soul, but of concrete deeds… - seen with the eyes of social science - persons [are] ... action systems of their own kind" (Luhmann, 1972: 23f.). Already from a system-theoretical perspective originating with Luhmann, both individual and organizational systems are accepted as a whole, the elements of which interact with one another in a specific way.[566]

This approach makes a self-organizational concept available, in which unknown, unpredictable elements are conceded to known elements in a new combination.[567] Nevertheless, these systems are suspected of moving only within the frame of their internal mode of operation, in "self-reference"[568], with the goal of maintaining themselves[569]. The danger of self-fulfilling prophecies[570] should thereby not be underestimated - which is confirmed by the experiences of the persons seeking advice who want to liberate themselves from certain personal problematic situations, but at the same time want to form their everyday situations which give rise to what they really want to avoid[571]. In order to make progress in this, a controlled transcending of system boundaries seems indicated; this would e.g. be reflected in the building of bridges to further counseling formats. If e.g. during the CISM accompaniment themes become clear which go beyond the incident connection, a delegation to (psycho-)therapeutic interventions is without fail indicated as well as to mediation in the case of conflict, to accompaniment during moarning in the

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[566] They thereby appear as "more than just the sum of their parts". This is a wordplay in the sense of an oversummativity or a *design quality* of the whole. This describes an idea in *design theory* and its mastermind Christian von Ehrenfels (cf. Ehrenfels, 1890), based on the Aristotelian saying: "The whole is more than the sum of its parts."

[567] Thus "the whole (the new) is less than the sum of its parts, because … from each 'part' only certain characteristics - and not the whole of its potential - are used" (Neuberger, 2002: 625).

[568] "Self-reference … is based on the concept of operationally closed… systems, that are only concerned with themselves" (Neuberger, 2002: 626). "There is neither input… nor output of units from the system. … This does not mean that there are no relations with the surroundings, but these relations are on a different level of reality…" (Luhmann, 1984: 403).

[569] The concept "autopoiese" has been taken from cell biology and refers to the characteristic of cells, that they cannot simply take on energy and matter, but that they have to incorporate these according to their own rules. "We want to call systems autopoietic that produce and reproduce elements of which they consist, through elements of which they do not consist." (Luhmann, 1984: 403)

[570] The phenomenon of "self-fulfilling prophecy" is repeatedly described in management literature (among others Argyris & Schön, 1996, dt. 2002; McGregor, 1970).

[571] Cf. Heinz Farmann, Chapter 3.1.1., Oswald Boelcke, Chapter 3.3.2.; Mathilde Missant, Chapter 3.4.2., Artur Krebs, Chapter 3.5.1., Stefan Maxim, Chapter 3.6.4., and Eduard Rickenbacher, Chapter 3.8.1.

case of farewell processes[572], to conversations in the search for meaning[573] etc.

5.8.4.   Enterprise knowledge management: Security also for Knowledge

For the theme "security", a similar double or multiple meaning as for the previous thematic areas deescalation and situation awareness is true. Security is necessary not only for those persons affected by an incident and for dealing with the information divulged by them in the counseling conversation; security should also be guaranteed for the professional and organizational knowledge coming from the counseling process. "It is a standard argument in [organizational counseling] …, that differences are to be made between signs, data, information, knowledge and meaning (Neuberger, 1995: 268). Results from CISM accompaniment generate knowledge and contexts of meaning that can be highly significant not only for the person affected, but also for the organization involved. Debriefing forms as an element of "organizational knowledge management"[574] are an area that is only just in the process of becoming a research object. First results for the areas "team quality" in the context of a security culture are beginning to appear; within these, significant dimensions can be identified: managment of situations relevant to security, finding of a team for issues of security, consequences for the [experienced] quality of security: "These results indicate an important role of team quality in the safety culture context regardless of the industrial field." (Harfmann, 2016: 28ff.). Similarly to knowledge management in general, in reflecting on the knowledge around the processing of highly individual case constellations, "the challenge will consist … in bringing together the contributions to an integrated total … (Neuberger, 1995: 197). CISM as a store of knowledge and a networker could become an "... expert in opening doors to other rooms ... " (*ibid.*). E.g. things that have become routine could thereby become "capable of consciousness … [and] be reconstructed when needed" (Neuberger, 1995: 268). For such a "typical «retrospectivity» of consciousness", CISM would by its very existence take sides institutionally and send a corresponding signal into the institution. In management, it is important to develop an awareness that such organizational processes of delegation are of eminent significance and that CISM can make a constitutive contribution toward this. The renowned organization scholar Karl Weick coined the apposite concept "retrospective giving of meaning" for this challenge (cf. Weick, 1995).[575] Such a procedure will seem to some to be counter-indicative, because it might contain potential for disturbance. However, in the balance, a growth in flexibility and maneuverability both of individuals and of whole organizations is to be

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[572] Cf. the description in connection with farewell and moarning processes in Chapter 1.4.2.5.

[573] Cf. the world-view foundation in the training of operational forces and sky marshalls in the Federal Police according to the existence analysis of Viktor Frankl.

[574] Knowledge management is the generic term for multiple strategic, operational and interpretative initiatives and management tasks, which have the goal of dealing as well as possible with knowledge (not data or information!), cf. Nonaka & Takeuchi, 1995; Pawlovsky & Reinhard, 1996: 148ff.; Rehäuser & Krcmar, 1997: 19ff.; Staehle, Sydow, & Conrad, 1999: 920f.; Roehl, 2000; Nohr, 2004 and many more.

[575] For the background to experience there are both vernacular sayings: "You're always smarter afterward", and quotations from people who know: "Care is simple, later insight is multiple." Goethe, 1855: 175.

expected.

5.8.5. Gender und Equality: Claim and Chance

Similar results are suggested when looking at the gender issue. The already noted persistent pressure of segregation[576] with its class ceiling effect must not be again lamented. In addition, it is clear that an "… advance of partnership and egalitarian attitudes also in connecting with the change in gender roles" (cf. Schumm-Garling, Martens, & Fischer, 1995; Krell, 2011) is understood by many as a "massive change in values" and experienced as an impairment to "the individual's psychological stability" (Rokeach, 1973: 25). A more rapid change in the direction of gender justice than could be observed during the past 40 years would surely have been desirable: "Where it exists, the glass ceiling not only hinders individuals but society as a whole. It effectively cuts our pool of potential [leaders] by eliminating more than half of the population" (Martin, 1991: 2)[577]. The description of a triple dilemma (equality[578], difference[579], deconstruction[580]) makes clear the difficulty and limitations of various equality programs[581] in spite of the prospect of advantages from competition (Krell, 2008). Even if Critical Incident Stress Managment did not set out with the goal of promoting gender levelling, the results of the present study show nevertheless that also in connection with critical incidents and their processing, the gender topic is virulent. Both the indications from the case reports[582] and the survey results[583] let one hope for further, though presently not intended gender levelling in the sense of a "destiny community of the persons affected by an incident" – independently of their gender. The presently observable ambivalence in the area, which on the one hand is brushed aside as a reaction[584] and by others is rated as highly intrinsic[585], opens very many spaces for promoting gender justice and thereby coming closer to the ideal of gender universality[586].

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[576] Cf. Chapter 5.4.2.4.

[577] Lynn Morley Martin was the US Secretary of Work from February 7, 1991 until January 20, 1993. On the difference between recognizing and doing that follows from this, a saying already by Friedrich Nietzsche has been transmitted, in which he uses the same image: "Bemusement over resistance. Because something has become transparent for us, we think it could now no longer resist us, - and then we are surprised that we see through it and yet cannot go through it! It is the same foolishness and the same amazement which the fly experiences in front of every glass window" (cf. Nietzsche, 1906).

[578] "Equal treatment of those who are unequal continues inequality. Moreover, equality *before* the law is not equality according to the law. *Claims* to rights are not the *reality* of rights (Neuberger, 2002: 809; italics by the author).

[579] Differentiation leads to the "continuation and strengthening of the stigma of divergence" (Knapp, 2011: 73). When defining the woman('s role) as "different to the role of men", the male remains the reference standard.

[580] Here deconstruction is understood as the proof of a gender normalization; it is not only a secondary interpretation, but in original text immanence. Every human being must attribute to his or her existence a meaning of his or her own. Every woman must herself work out her (female) identity, collective hermeneutics fail. However, only individual presence also fails because of the male superiority and because of the persistence of societal practices and institutions (cf. Knapp, 2009: 48).

[581] Based on the central hypotheses of the US-American sociologist George Homans (cf. Homans, 1958; Homans, 1961, 1968, Staehle, Sydow, & Conrad, 1999: 871f.).

[582] Cf. Chapter 3, Part I – Qualitative Case Analyses.

[583] Cf. items 25) and 30); Chapter 5.4.2.4.: "… that the contradiction against the thesis from item 30) comes even more decisively from the male (77.21%) than from the female (69.29%) camp" and "… about two thirds of all the persons questioned (67,48%) contradict the opinion that CISM is a fitting/appropriate work method precisely for female colleagues to face loading events".

[584] "… Men admit that they now show more feelings": "… *it is now politically correct to do so.*" (Trompenaars & Hampden-Turner, 1997, 2003, 2003: 223).

[585] Cf. Eccard, 2004: 135; altogether 135-152.

[586] Cf. Eccard, 2004: 259.

5.8.6. Controling und Coping: Development of Perceived Support

In looking through more recent literature on "human resources … and work relations, a […] drastic change of perspective can be perceived. … Work with personnel … has become a genuine management task" (cf. Staehle, Sydow, & Conrad, 1999: 777). "Care of personnel aims at transmitting to all colleagues on the path of health maintenance, good performance capability and strength, work satisfaction and corporate identity, with at the same time appropriate loading… and influences that they damage health as little as possible" (Jung, 2006: 625). In order to deploy colleagues effectively and sustainably, among other things their resources[587] and support possibilites for personal conflict management[588] also become of central interest. In this, it is astonishing that a postulate from qualitative research (Thomas Theorem[589]) can be proven through the results of the (quantitative) survey results. Personal evaluation lets first theoretical or imaginary elements coagulate in the reality of social and business management.

In view of the support through a CISM system, the differentiation between subjectively felt help and objectively provided assistance proved to be very highly significant. Thus, from the results a double effect of CISM support can be noted: Not only the persons affected by an incident who make use of a specific counseling service experience support, but equally the entire staff through the fact that they can be sure of personal conversationsal backups at any time. In this way, possible incidents are rated in a clearly less threatening manner[590].

It is hardly possible to assess too highly the benefit for business management connected with this: Already the passive provision of a support offer actively counteracts loading reactions.[591] The results of the present study can give an impressive proof of this.

In addition, in connection with the following Organisational Support Theory (Eisenberger, Huntington, Hutchison et al., 2002), a significant amelioration of the reciprocal relationship between the individual and the organization is to be expected, along with the increase in motivation and performance connected with this:[592] "The establishment of [… counseling offers] in businesses can be advantageous both for the colleague and for the business" (Jung, 2006: 631). Already the perceived support (without actually having recourse to it) is experienced as an organization's

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[587] Cf. the extensive literature on human resource management (HRM), e.g. Weber & Weinmann, 1989, Schreyögg, 1991; Wunderer & Schlangenhaufer, 1992, 1992; Ackermann, 1994, and many more.

[588] C.f. Blake, Shepard, & Mouton, 1964; Kriesberg, 1973; Brown, 1983; Glasl, 2004 and many more.

[589] According to the so-called Thomas Theorem, individuals orient their behavior based on the interpretation of a situation and not on the "objectivity" of a situation as such. The foundation of this scholarly model says that without an interpretation, the ways of behaving and the consequences in deeds cannot be reliably understood. Literally: "*If men define situations as real, they are real in their consequences.*" (Thomas & Thomas, 1928, 1970; 528).

[590] This thesis has been supported since the mid-1980s, when perceived support was subjectively rated as more important than the support actually received by the individual (cf. Kessler, 1986).

[591] The transfer from perceived support to perceived control thereby only results in a further underpinning of the thesis presented: The subjective feeling of being able to control a load or also a level of loading already results in a significantly higher loading tolerance (cf. Glass & Singer, 1972).

[592] Consistently with this, organizational support is standardized and called by the *terminus technicus* Perceived Organisational Support (POS).

achievement to motivate its members to active participation [593]

As a result of this study, the aspect of perceived support must be rated as underestimated both a) as a tool for management and steering, and b) for reducing the individual loading, as well as c) in the sense of an economic factor that lowers costs. In order to understand personnel management comprehensively, one must think about providing an implemented debriefing system.

5.8.7. Normalisation und Tradition: Not everything in the past was bad

"In the meantime, one of the best cared for assumptions in management is that the surroundings of businesses, administrations, and associations were marked in the past by stability" (Kühl, 2000: 25). However, the presumption remains. This insight is surely not only true of organizations, but also of individuals. For individual persons as well, it is true that their biographical course in the past as in the present was and is marked by various forms of instabilities. With all commitment for a good institutionalized frame for debriefing critical events, it is necessary to keep in mind that persons affected have always already found individual and creative ways for processing threatening situations. An 80% share of persons affected who cope with an incident they have experienced without further support, speaks for itself [594]. In addition, research in social support over the past twenty years has identified mechanisms that are echoed in the present study[595]: Persons who perceive a high level of social support describe a higher level of wellbeing and health than their fellow human beings with less social support (cf. Knoll & Schwarzer, 2005). Already in 1985, Cohen and Wills held the thesis that persons who are socially well supported, in general are more satisfied in life and are better able to cope with loading[596] (cf. Cohen & Wills, 1985; Cohen & Wills, 1985). This idea was differentiated through Farmer and Sundberg in the sense that persons with a stronger social network develop a buffer that, in case of need, makes them more resistant to stress reactions after loading events[597] (cf. Farmer & Sundberg, 2010).

In this sense, a CISM offer should be situated within the frame of its social support function, and at the same time it will be relativized. The findings of the FACIQ evaluation of contact options[598], with the indications of criteria of choice oriented by relationships that tendentially distance themselves from professional offers of support, point in this described direction.

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[593] Cf. the agreement to item 16), "The availability of CISM support in my company is a flight safety factor", with 72%, and to item 49) with 65.6% "The availability of CISM support make me feel supported at work."

[594] Cf. statistics of the Mayday Foundation.

[595] For the positive: cf. Heinz Farmann, Chapter 3.1.3. and Eduard Rickenbacher, Chapter 3.8.1. and 3.8.2; for the negative: Oswald Boelcke, Chapter 3.3.1.; Mathilde Missant, Chapter 3.4.1. and 3.4.3.; Artur Krebs, Chapter 3.5.1. and 3.5.4.; Stefan Maxim, Chapter 3.6.1. and 3.6.2.

[596] Thus the so-called Buffering Hypothesis (Direct Effects Hypothesis) - supported also by the results of the Berlin Social Support Scales (BSSS) from 2003 (cf. Schwarzer & Schulz, 2003).

[597] The Buffering Hypothesis.

[598] , Cf. Chapter 5.4.2.1., "points of contact".

Consequently the implementation of a CISM support system in an organization will potentially best succeed after a well-founded evaluation of already existing coping mechanisms by persons affected by a critical incident. On the one hand, the experience of stress can increase when a different kind of support is provided than the one desired[599]; on the other hand, many ideas were taken over unquestioned in the guiding principles of the "learning organizations"[600] as well as the myths transported in them about causally controllable change[601], that presumably had rationalized unproductive spaces away. At times, their recovery has to be worked out again later cumbersomely and at a cost. Thus an ancient wise saying is also true of the implementation of CISM: "Test everything; hold fast to what is good"[602].

5.8.8. Evaluation und Evolution: Further Development is Indispensable

"In the last few years, the concept of effectiveness has become increasingly important. In the striving to raise ... the quality of non-profit organizations, an impact-oriented management is sought …" (Stockmann, 2006: 7). On this background, the present study tried in multiple ways to trace the effect of Critical Incident Stress Management. As in all areas of economy and administration, through limited connectivities of humanist orientation and economic logic, CISM - as well as many others - comes under pressure to prove its effectiveness. The chapters on evaluation[603] in the present study brought further proof of this. Nevertheless, precisely because of this, constant further development will be necessary also in the area of CISM. One will thereby have to keep in mind that the consequences of regular evaluation may not be drawn only system-immanently. "Once successful rules and routines have been established, there is a tendency in organizations to reach an increased efficiency through refinement of the existing routines." (Kühl, 2000: 147) The ideal type of a "fractal organization", in which a basic form of similar self-forming structures can be found in all units, will prevent a real futher development[604]. Thus, in order to reach a sustainable effect, a correct balance between field immanence and field distance will have to be reached. Both for the evaluation of an individual counseling contact[605] and also for that of the organizational implementation[606], tools have been developed here and evaluated. As also in this study, evaluations do not always bring about pleasant results[607]. However, experience shows that an honest and transparent discussion with the available feedbacks is in any case worthwhile.

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[599] On this cf. the research by Thoits, 1986, as well as the results of the FACIQ, Chapter 5.4.2.5.3., "alternate settings".
[600] Cf. Ulich & Wülser, 2012: 116-127.
[601] Freely cited according to Kühl, 2000: 18.
[602] "πάντα δὲ δοκιμάζετε, τὸ καλὸν κατέχετε." 1Thess 5:21.
[603] Cf. Chapter 4, especially 4.1.15., 4.2., 4.3., as well as Chapter 5.4., especially 5.5. and 5.6.
[604] Cf. *ibid*.: 132.
[605] Cf. Chapter 4.1., especially 4.1.15.
[606] Cf. Chapters 5.2. and 7.2.
[607] Cf. e.g. Chapter 5.4.2.1.2., item 38), or Chapter 5.4.2.1.4., items 02), 08), and 52).

The further development of a CISM evaluation presented in this study predestines it for use in organizations that want to use CISM as a tool oriented toward performance and effectiveness. For this, not only airline businesses should be looked at. The tools presented are especially appropriate for steering business shares, the "high social responsibility" of which becomes apparent in the public space "not only in the intended, but also in the unintended consequences of their … doing" (Stockmann, 2006: 302f.). Both the management of the critical incident stress and that of a CISM organization will thereby not remain free of contradictions.

"The best mind, however, is characterized by being able to keep two opposing ideas in its head - while still working" (Fitzgerald, 1926: 39).