A longitudinal study was undertaken to determine whether interpersonal competence of teachers and students was related to coping strategies of students during an oral examination. The main research question was to find out whether expected supportive dyadic coping, the wish to delegate coping and interpersonal trust, assessed 8 weeks before an oral exam, could serve as a possible predictor of coping strategies during the exam. Students (N=67) from a department of education and ranging in age from 21 to 38 completed the survey. Significant positive correlation existed between interpersonal trust and coping strategies. Expectations that the examiner can be trusted was positively associated with coping strategies showing consideration and negatively correlated with antisocial-aggressive coping. The results support the hypothesis that examinees' trust in their examiner is positively correlated with seeking social support during the oral exam. Interpersonal trust as a protective factor in an exam situation may lead to cooperation and prosocial coping strategies, but if risk of becoming vulnerable is too high, defensive or even aggressive coping behaviors emerge. The mobilization of supportive dyadic coping was a powerful predictor of seeking social support. Those who asked the examiner openly for support did rely on this coping strategy in real life situations. (JDM)
DYADIC COPING AND INTERPERSONAL TRUST
IN STUDENT-TEACHER INTERACTIONS

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
In the last decades stress research has constantly broadened its view of coping processes. There is a clear tendency initiated by authors like Hobfoll (1998) or Lyons et al. (1998) to leave Lazarus' individualistic point of view and broaden the understanding of coping by conceptualizing it as a communal process. That means also to look at other social variables which are deemed to be of major importance for coping behavior. Therefore, the focus of this longitudinal study was to ask whether interpersonal competencies of teachers and students were related to the coping strategies of students during the stressful life event "oral examination", lasting 45 minutes.

Coping with stress plays an important role during oral academic exams. A powerful way of conceptualizing coping strategies in stressful life-events is the Strategic Approach to Coping Scale constructed by Hobfoll and his colleagues (Dunahoo et al., 1998). This instrument emerged from a theory based multiaxial model of coping consisting of three axes: active-passive, prosocial-antisocial and direct-indirect. It was a perfect basis for this study, because it includes beside individualistic also social coping dimensions. Therefore, it was possible to relate variables of interpersonal competencies to prosocial as well as antisocial coping strategies during the exam.

Interpersonal competencies were assessed by the examinees' expectation of coping assistance from the examiner (dyadic coping) and interpersonal trust. First, it was tried to verify that the coping strategies used during the oral examination are related to the trust of an examinee in his or her examiner. Therefore, the present study focused on a number of correlations over time between interpersonal trust and coping during the exam. Additionally, we looked at dyadic coping competencies, which the examinees expected from their examiners in order to determine, for example, examinees' delegation of coping as potential predictor of a more assertive coping behavior during the examination.

Dyadic coping as an important variable of interpersonal competence is defined as the efforts of both, e.g. examinee and examiner, to engage in a stress management process, aimed at creating a new homeostasis within the dyad as a unit, as well as within both persons individually. Bodenmann (1997) distinguished different forms of expected dyadic coping. Two forms of expected dyadic coping are relevant here, first supportive dyadic coping, by which the examinee expects the examiners' assistance in his/her coping efforts and secondly, delegated dyadic coping, by which the examiner should take over explicit beneficial tasks in order to reduce the stress experienced by the examinee.

Trust as another important interpersonal competence has been shown to moderate the impact of stressful life events (Buck & Bierhoff, 1986). Students relying on their examiner
may cope more effectively with stress than those who do not, because they are more open to advice and support from others. The main research question was to find out, whether expected supportive dyadic coping, the wish to delegate coping and interpersonal trust, assessed 8 weeks before an oral examination (time 1), may serve as possible predictors of coping strategies during an oral exam (time 2). A conceptual model representing the hypotheses tested here is depicted in the following figure.

![Conceptual model of dyadic coping, interpersonal trust and coping behavior](image)

Figure 1: Conceptual model of dyadic coping, interpersonal trust and coping behavior

**Methods**

**Participants**

The study comprised longitudinal data from 1998, which have been assessed six to eight weeks before (time 1) and soon after an oral exam (time 2). The sample consisted of 67 students from the Department of Education with a mean age of 24.7 (standard deviation 4.4) ranging from 21 to 38 years. Sixty-six per cent of the subjects were female and 34% were male. All students took their first academic oral exams with the same female examiner. The examiner was well-known to all examinees from two different seminars with obligatory attendance. Besides, every examinee had one to two contacts with the examiner at her special office hour for examinees.

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1 This study was financially supported by a grant of the Ministry of Science of Northrhine-Westfalia, Germany, to Petra Buchwald.
Measures

Several questionnaires were used to assess the variables dyadic coping, interpersonal trust, and coping strategies. Students were asked to complete a modified version of the Interpersonal Trust Scale developed by Buck and Bierhoff (1986). Item examples are “I am able to speak openly to my examiner knowing well that he or she will listen to me” or “I can expect from my examiner that he or she will be honest and fair”. The scale showed acceptable reliability of Cronbach’s $\alpha = .87$.

To assess dyadic coping, a modified instrument originally constructed by Bodenmann and Perrez (1993) was used, the Dyadic Coping Scale for Exams. Dyadic coping was operationalized first as ‘supportive dyadic coping’ by which the examinees want the examiners assistance in their coping efforts. Typical items are „I openly tell my examiner how I feel and that I would be happy receiving her/his support“ or „I let the examiner know if I would be glad to get her/his relevant advice and instrumental support“. Secondly, delegated dyadic coping was measured dealing with explicit beneficial tasks taken over by the examiner. This latter kind of dyadic coping consists of three different subscales: (1) ‘delegated coping at the beginning’ of the examination (“It would be really helpful for me if I could start with an introduction into the subject at the beginning of the exam”); (2) ‘delegated coping referring to yes or no questions’ (“It would be really helpful for me if the examiner would give me questions answerable with yes or no”) and (3) ‘delegated coping referring to the atmosphere’ during the examination (“It would be really helpful for me if a writing-table stands between the examiner and me”). As in previous studies (Buchwald & Schwarzer, 1998), each subscale demonstrated good internal consistency: Cronbach’s $\alpha = .71$ for the subscale 'supportive dyadic coping'; Cronbach’s $\alpha = .74$ for 'delegated dyadic coping- yes or no question; Cronbach’s $\alpha = .72$ for 'delegated dyadic coping-beginning; Cronbach’s $\alpha = .71$ for 'delegated dyadic coping – atmosphere’.

Finally, the items of the German state version of the SACS (Starke, Schwarzer & Hobfoll, unpubl.) were reformulated as situation-specific items assessing coping in exams (SACS-exam). The main differences between the original SACS and the German adaptation are that ‘aggressive’ and ‘antisocial action’ are combined in one subscale, ‘aggressive-antisocial action’. The same is true for ‘cautious action’ and ‘social joining’ described as 'consideration'. An additional subscale was detected in the German version that is not included in the American version described as 'reflection'. Example items are „I didn’t give up, even when the exam looked its worst and tried to turn things around“
(assertive strategies); “I looked to the keeper of the minutes in need of help” (seeking social support); “I tried to be in control but let the examiner think he or she was still in charge” (indirect strategies); “I retreated as far as possible from the examination until it was over” (avoidance); “I looked out for my own best interests even if it meant hurting the examiner” (aggressive-antisocial strategies); “During the exam I thought carefully about how the examiner feels” (consideration); “In the exam I trusted my instincts not my thoughts” (instinctive strategies) and “I tried to do something to help me calm down and, only then, started problem solving” (reflection). All Cronbach’s alphas indicated a sufficient reliability of the measures. The Cronbach’s alpha for the German version (SACS-exam) was $\alpha = .87$. The reliability for all subscales was of reasonable magnitude, ranging from $\alpha = .68$ to $\alpha = .87$. The subscales showed discriminant validity whilst all correlations were below $r = .48$.

Results

Correlations between specific coping strategies and interpersonal trust in professional relationships were able to shed some light on the nexus between coping styles and interpersonal competencies during an examination phase. As shown in Table 1 this was reflected in the significant positive correlation between interpersonal trust and the coping strategie “seeking social support”. In addition, the expectancy that the examiner can be trusted was positively associated with the coping strategie ‘showing consideration’, and negatively correlated with ‘antisocial-aggressive coping’.

Table 1: Pearson Correlations between the Interpersonal Trust Scale at time 1 and subscales of the Strategic Approach to Coping Scale-exam at time 2.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Interpersonal Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>seeking social support</td>
<td>.31*</td>
</tr>
<tr>
<td>consideration</td>
<td>.37**</td>
</tr>
<tr>
<td>aggressive-antisocial strategies</td>
<td>-.20*</td>
</tr>
</tbody>
</table>

Note. * p ≤ .05  ** p ≤ .01 (two-tailed significance)
To examine the relative strength of delegated and supportive dyadic coping as predictors of coping strategies during oral exams stepwise multiple regression procedures were performed with different coping strategies as dependent variables. The set of regression analyses were conducted with the following variables: ‘delegated dyadic coping – beginning’, ‘delegated coping referring to yes or no questions’, ‘delegated coping referring to the atmosphere’, ‘supportive dyadic coping’ and ‘interpersonal trust’.

The first set of stepwise regression analyses on the coping strategy ‘assertiveness’ identified ‘delegated dyadic coping – beginning’ as a strong predictor accounting for 21% of the variance in assertiveness scores (F= 8.73; p ≤ .001). This kind of delegated dyadic coping has also been found as a predictor of ‘reflection’ accounting for 13% of the variance with a multiple correlation of R = .36 (F= 5.73, p ≤ .02). Finally, ‘supportive dyadic coping’ represented a very strong predictor for the coping strategy ‘seeking social support’, with a multiple correlation of R = .57 explaining 32% of its variance (F=17.18, p ≤ .000).

Two variables were left in the equation with ‘avoidance’ as dependent variable. The strongest predictor was ‘delegated coping referring to yes or no questions’. This relationship explained 31% of variance with a multiple correlation of R = .35 (F=15.8, p ≤ .000). If integrated into the equation together with ‘delegated dyadic coping – beginning’ both variables were to able to explain 43% of the variance with a multiple correlation of R = .65 (F=12.94 p ≤ .000). The use of ‘delegated dyadic coping – beginning’ leads to less avoidant coping behavior (β=-.36) but the higher value of β (.46) for the ‘delegated coping referring to yes or no questions’ implied that the wish to get closed questions, answerable with yes or no predominates in the development of avoidance.

Again, two variables were left in the equation with ‘consideration’ as dependent variable. The strongest predictor was ‘delegated coping referring to yes or no questions’ with a multiple correlation of R = .35, accounting for 12% of variance (F=5.13, p ≤ .03). ‘Supportive dyadic coping’ was the second strongest predictor with a multiple correlation of R = .46, accounting for additional 9% of variance in consideration-scores (F=5.02, p ≤ .05). Together with ‘delegated dyadic coping – beginning’ both variables were to able to explain 43% of the variance with a multiple correlation of R = .65 (F=12.94 p ≤ .000). The use of ‘delegated dyadic coping – beginning’ leads to less avoidant coping behavior (β=-.36) but the higher value of β (.46) for the ‘delegated coping referring to yes or no questions’ implied that the wish to get closed questions, answerable with yes or no predominates again in the development of avoidance.
Discussion

The results of this study supported our hypothesis that examinees' trust in their examiner, recorded 8 weeks before the examination, is positively correlated with seeking social support during the oral exam. This probably stems from examinees' being more open to advice from the support providing examiner. Besides, interpersonal trust was able to predict consideration during the examination, which means the more the examinee trusts in the examiner the more he or she will let the examiner have his or her way. On the other hand, interpersonal trust was negatively related to aggressive-antisocial coping behavior during the exam. This contrary relationship perfectly describes the element of risk that gives the trust dilemma its basic character. Interpersonal trust as a protective factor in an exam situation may lead to cooperation and prosocial coping strategies (e.g. consideration), but if the risk of becoming vulnerable or dependent is too high, defensive or even aggressive coping behavior emerges. However, interpersonal trust could not serve as a significant predictor of coping strategies during an oral examination if included together with the potential predictive variables delegated or supportive dyadic coping.

'Delegated dyadic coping at the beginning' of the oral exam appeared to reduce 'avoidance' and strengthened coping strategies like 'assertiveness' and 'reflection'. Contrary to this, examinees who preferred an examination with closed questions, that is "yes- or no-questions", used an avoidant coping strategy. Avoidant behavior reduces emotional arousal that is triggered by ambiguous and therefore threatening situations. In oral exams, a question answerable with yes or no may reduce ambiguity by its closed answering format. The mobilization of 'supportive dyadic coping' was a powerful predictor of 'seeking social support'. It illuminated that explicit dyadic coping effort of the examinee-examiner-dyad, weeks before the examination itself, strongly influenced the coping strategy used during the actual exam. More precisely, those who asked the examiner openly for support did rely on this coping strategy in the real life situation. In conclusion, we can emphasize the educational significance of interpersonal dyadic competencies like supportive and delegated dyadic coping or interpersonal trust on the student-teacher interaction by enhancing functional coping behavior during an oral exam.
REFERENCES


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