

The Self-Efficacy Questionnaire for School Situations

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Introduction:

The Self-Efficacy Questionnaire for School Situations (SEQ-SS) is an instrument developed to assess children's and adolescents' cognitions focused on situations associated with school attendance. Cognitions signaling low self-efficacy may play a role in the development and/or maintenance of a school attendance problem. In turn, changes toward increased self-efficacy may be associated with the amelioration of a school attendance problem. Reliable and valid assessment of the self-efficacy beliefs of young people can further our knowledge about the development and maintenance of school attendance problems, and guide the tailoring of cognitive-behavioural interventions to the specific needs of young people who are having difficulty attending school. Systematic assessment of self-efficacy beliefs is also important in treatment outcome research, as we try to understand more about what it is that makes treatment effective. For example, does CBT effect a change in a school refuser's self-efficacy, such that the young person is then more likely to return to school? Or is it that increased school attendance effects a change in the young person's self-efficacy for dealing with stressors associated with school attendance? The examination of cognitive change as a mediator of treatment outcome is virtually non-existent in the literature on treatments for young people (Kendall & Treadwell, 1997; Prins & Ollendick, 2003). However, one recent study suggests that self-efficacy is indeed an important working mechanism in cognitive-behavioural treatment for school refusal in adolescence (Maric, Heyne, MacKinnon, Van Widenfelt, & Westenberg, in preparation). An association has also been made between university students' self-efficacy beliefs and their attendance at classes (Jones, 2008).

Development of the SEQ-SS:

Attention to the assessment of the cognitions of young people with school attendance problems was stimulated by Mansdorf and Lukens' (1987) pioneering report in which "cognitive analysis" was used to help guide treatment with two school refusers (10 and 12 years old) and their parents. Based on the idea that attitudes and beliefs interfere with the effectiveness of behavioral interventions, Mansdorf and Lukens assessed the cognitions of

these children and used self-instruction techniques to help them employ coping self-statements aimed at guiding positive behavior. A cognitive restructuring process was used with parents to challenge distorted beliefs about their child's problem and about management of the problem. Since Mansdorf and Lukens' (1987) report there have been other accounts suggesting that school refusers may have low expectations about their ability to cope with social- and emotional-related problems (e.g., Heyne & Rollings, 2002; Heyne, 2006; Place, Hulsmeier, Davis, & Taylor, 2000, 2002).

Recognizing the potential research and clinical value of a standard assessment of school refusers' cognitions, Heyne et al. (1998) developed the Self-Efficacy Questionnaire for School Situations (SEQ-SS). The original SEQ-SS was a 12-item self-report measure in which young people indicated, on a 1–5 scale (from “really sure I couldn’t” to “really sure I could”), the strength of their belief that they could cope with potential stressful or anxiety-provoking situations associated with school attendance and non-attendance.

Examples of questionnaire items include:

- “How sure are you that you could do schoolwork set by the teacher?”
- “How sure are you that you could handle questions from others about why you’ve been away from school?”
- “How sure are you that you could cope with being away from your mother or father during school-time?”
- “How sure are you that you could approach your teacher about something?”

The SEQ-SS has recently been extended and translated into Dutch for current research and clinical purposes (SEQ-SS-NL¹; Heyne, Maric, Kaijser, Duizer, Sijtsma, & Van Der Leden, in preparation). Thirteen items have been added to provide fuller assessment of school-related self-efficacy beliefs. The additional items provide more information about self-efficacy beliefs pertinent to adolescence, and to interaction with peers, school staff, and parents.

Examples of newly added items include:

- “If you didn’t feel motivated to go to school in the morning, how sure are you that you could still get yourself to go to school?”
- “How sure are you that you could keep yourself calm if other kids at school annoyed you?”
- “How sure are you that you could go to school if you felt like you weren’t close to the other kids at school?”

¹ In this document, the 25-item SEQ-SS-NL is simply referred to as the SEQ-SS-25.

Psychometric Properties:

The original 12-item SEQ-SS was administered to 135 school-refusing young people aged 5 to 15 years (Heyne et al., 1998). It was found to have good internal consistency (Cronbach's alpha = .85) and good temporal stability (intraclass correlation of = .90). It comprised two logically cohesive factors, namely self-efficacy beliefs related to situations involving academic/social stress, and self-efficacy beliefs related to situations involving separation/discipline stress (Heyne et al., 1998).

The more recent 25-item SEQ-SS (SEQ-SS-25), administered to 300 school-attending young people aged between 10 and 18 years, also had good internal consistency with a Cronbach's alpha coefficient of .83 (Van der Leden, 2008)². Four thematically meaningful subscales (see 'Scoring and Interpretation' below) were derived via principal components analysis, with acceptable Cronbach's alpha coefficients ranging from .62 to .73 (Van der Leden, 2008). Total explained variance was 43.3%. The temporal stability of the SEQ-SS-25 is reasonable, with a correlation of 0.67 between initial testing and re-testing between two to three weeks later (Duizer, 2007)³.

The SEQ-SS-25 shows promising convergent validity, with a correlation of 0.53 with the total score of Muris' (2001) Self-Efficacy Questionnaire for Children (SEQ-C), and a correlation of -0.51 with Muris and colleagues' (1998) Screen for Child Anxiety Related Emotional Disorders-Revised (SCARED-R) (Duizer, 2007). The subscales of the SEQ-SS-25 also correlated in theoretically meaningful ways with related constructs. 'Dealing with normal school situations' had significant moderate correlations (i.e., > .04) with the total SEQ-C score, with the social subscale and emotional subscale of the SEQ-C, and with measures of optimism, depression, and anxiety. 'Dealing with uncertainty' had significant moderate correlations with the emotional subscale of the SEQ-C, and with the measure of anxiety. Low but significant correlations (between 0.3 and 0.4) were found between 'Dealing with special school situations' and the SEQ-C total score, the SEQ-C emotional subscale, and the measure of anxiety. Low but significant correlations were also found between 'Dealing with authority / not liking school' and the SEQ-C total score, the SEQ-C academic subscale, and the measure of depression.

Finally, the SEQ-SS appears to be sensitive to change. In two studies in which the SEQ-SS-12 was administered to clinically-referred young people refusing to attend school,

² For the 23 item version, following removal of two items during factor analyses.

³ These results were based on the 25 items of the SEQ-SS-NL. Given recent results associated with the PCA (i.e., removal of two items), re-analysis of test-retest reliability will be conducted.

significant increases in self-efficacy were observed following treatment (Heyne et al., 2002; King et al., 1998). In a third study which made use of the SEQ-SS-25, self-efficacy was again observed to increase following treatment (Sauter, Heyne, Westenberg, Van Widenfelt, & Vermeiren, submitted). In all three studies, increases in self-efficacy were found to accompany increases in school attendance. Interestingly, in the controlled study of King et al. (1998), there was a significant increase ($p < .05$) in self-efficacy for young people in the wait-list control condition. By the same token, young people in the treatment condition reported significantly greater self-efficacy at post-treatment ($p < .001$) relative to those in the control condition.

Scoring & Interpretation:

Scoring of the SEQ-SS-25 comprises derivation of a total score, and scores for four subscales. Twenty-three of the 25 items are used in the derivation of the total score and the subscale scores (i.e., all items except items 18 and 20)⁴.

Total score:

Total scores range from 23 to 115, with higher scores reflecting higher self-efficacy. Mean total scores derived from a non-clinical sample of 300 Dutch students (ranging in age between 10 and 18 years) were:

- Mean for full sample: 93 (sd = 10)
- Mean for males: 95 (sd = 10)
- Mean for females: 92 (sd = 9)

For each young person, record their total score, and note how many standard deviations it is above or below the mean, according to the gender of the young person. Boys have been found to report higher self-efficacy for situations associated with school attendance (Sijtsma, 2008), indicating that client-specific scores are ideally examined in the light of gender-related norms.

⁴ The remaining two items (18 = 'hoofdpijn of buikpijn' [headache or stomach-ache], and 20 = 'verdrietig of somber' [sad or depressed]) are experimental items which remain in the questionnaire until such time as we have been able to evaluate the SEQ-SS-25 in a sample of clinically-referred school refusers. In the meantime, these items are not included in the total score or subscale scores.

Subscale scores:

Scores are derived for 4 subscales, according to the following item numbers:

1. Dealing with special school situations
(Omgaan met bijzondere school situaties)
Items = 7, 8, 11, 12, 16, 19, 25
2. Dealing with normal school situations
(Omgaan met gewone school situaties)
Items = 3, 4, 5, 9, 14, 24
3. Dealing with authority / not liking school
(Omgaan met autoriteit / school niet leuk vinden)
Items = 2, 6, 15, 21
4. Dealing with uncertainty - in yourself, with others, without parents
(Omgaan met onzekerheid - in jezelf, met anderen, zonder ouders)
Items = 1, 10, 13, 17, 22, 23

For each young person, total the score for each subscale, and divide the total subscale score by the number of items in that subscale, resulting in a value between 1 (representing “really sure I couldn’t”) and 5 (representing “really sure I could”). This facilitates analysis of intra-individual differences across the respective subscale scores. That is, the direction and size of the differences between the four subscale scores can be examined, to determine areas of relatively high and low self-efficacy for the young person. Comparisons with the subscale scores for the normative sample can also be conducted, as follows:

Subscale (abbreviated name)	Total Sample mean (standard deviation)	Males mean (standard deviation)	Females mean (standard deviation)
1. Special situations	3.9 (0.6)	4.0 (0.6) ^a	3.8 (0.5) ^a
2. Normal situations	4.0 (0.6)	4.1 (0.5) ^b	3.9 (0.6) ^b
3. Authority	4.1 (0.7)	4.1 (0.6)	4.1 (0.7)
4. Uncertainty	4.3 (0.5)	4.3 (0.5) ^a	4.2 (0.5) ^a

^a p < .05

^b p < .001

Item scores:

The items of the SEQ-SS-25 can also be scanned to determine areas of relatively high self-efficacy and relatively low self-efficacy, intra-individually. For example, a young person may endorse '5' ("really sure I could") or '4' ("probably could") for almost all of the items in the questionnaire, except for one or two items for which a '3' ("maybe") or '2' ("probably couldn't") have been endorsed. This item-level information can be important with respect to treatment-planning (e.g., social skills training when the young person reports relatively little self-efficacy for answering others' questions about absence from school).

Further Information:

For further information about the SEQ-SS, whether in relation to its clinical/educational applications or research-related applications, please contact Dr David Heyne:

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