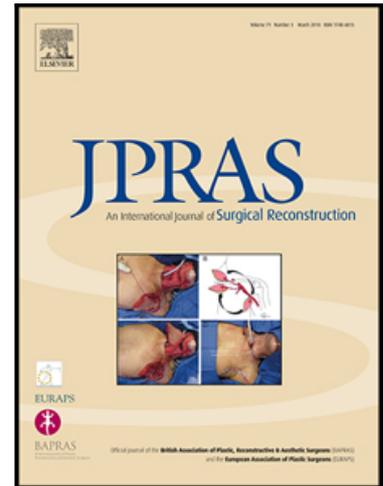


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'Everybody is watching me'

**A closer look at anxiety in people with facial palsy**

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**Running title:** Social interaction and appearance anxiety in facial palsy

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## Key Points

Question: What is the psychosocial impact of a facial palsy? More specific: is social anxiety a part of appearance concerns in this group?

Findings: Women and younger people are likely to have more appearance concerns. An avoidant coping style leads to more social anxiety.

Meaning: Physicians should be aware of the subjective impact of the palsy on their patients rather than just focus on objective measures, especially in younger patients and women.

**Abstract**

**Objectives:** Objectives were to evaluate sociodemographic and disease related factors, and coping style associated with social interaction and social appearance anxiety in people with unilateral facial palsy.

**Methods:** Medical data were extracted from electronic health records and participants completed the Social Interaction Anxiety Scale (SIAS), Social Appearance Anxiety Scale (SAAS) and Coping Orientation to Problems Experienced inventory (COPE). Associations of SIAS and SAAS scores with sociodemographic and disease variables, and coping were assessed with multiple linear regression. **Results:** Among 111 participants (mean age 58.6 years; 59% women), higher age and greater use of emotion-focused coping were associated with lower SIAS scores, whereas greater use of avoidant coping was associated with higher SIAS scores. Higher age, male sex and greater use of emotion-focused coping were associated with lower SAAS scores, whereas greater use of avoidant coping was associated with higher SAAS scores.

**Conclusions:** Health-care providers should understand that women and younger people are more likely to have social appearance concerns and that this is not predicted by the objective severity of facial palsy.

**Key Words**

Facial Palsy

Appearance

Social Anxiety

Coping

## INTRODUCTION

Facial palsy refers to decreased activity of the facial muscles caused by various temporary or permanent conditions that affect the facial nerve, for example Bell's palsy, Ramsay Hunt syndrome or trauma<sup>1</sup>. Women and men in all ages can develop facial nerve problems. Facial palsy can lead to facial disfigurement with both functional (e.g., limited eye closure, difficulties with eating or drinking) as well as psychosocial consequences such as social anxiety, avoidance and feelings of low self-esteem<sup>2</sup>. People with facial palsy report that they feel their face is no longer 'right'; their face is not symmetrical anymore. Beside the functional complaints it can be mentally burdening: people with facial palsy often indicate they prefer not to look in the mirror because their face startles them, feel insecure about their appearance in social situations and worry about judgement from others<sup>3</sup>. The psychological and psychosocial impact of visible differences experienced by people with facial palsy can be considerable, given the fact that the face plays a crucial role in social interaction<sup>4</sup>. However, anxiety in social situations has not been extensively studied among people with facial palsy.

A recent systematic review on the psychosocial impact of facial palsy<sup>5</sup> included 5 studies (N = 30 to N = 126) that used the anxiety subscale of the Hospital Anxiety and Depression Scale (HADS-A)<sup>6</sup> to estimate levels of anxiety. Between 30.5% and 40% of people with facial palsy scored above the cut-off threshold of 8, compared with 3.8 to 10.4% in a general adult population. Tseng et al.<sup>7</sup> found that patients with a Bell's palsy had a 1.59 higher chance of having an anxiety disorder. Across these studies, levels of anxiety were unrelated to the severity of the facial palsy as measured using the House-Brackmann facial grading scale or the Sunnybrook scale<sup>8,9</sup>. None of the studies included in the systematic review assessed social anxiety concerns.

In a Delphi survey<sup>10</sup> among clinicians, researchers, patients and carers, gaining a deeper insight in the psychosocial impact of living with facial palsy was established as a research priority. Research across conditions leading to visible differences has shown that

the objective severity of the condition often fails to predict psychosocial adjustment, while psychosocial consequences seem to be related to younger age, female sex and style of coping<sup>11</sup>. A better understanding of (social) anxiety and adaptive ways of coping would support research to improve patient-centred care in people with facial palsy, including the adaptation of counselling and interventions to the peoples needs. To our knowledge, however, no quantitative studies have comprehensively assessed which factors contribute to social interaction and appearance concerns in people with facial palsy. Therefore, the objectives of this study were to identify sociodemographic and disease-related factors and coping styles associated with social interaction anxiety and social appearance anxiety in people with unilateral facial palsy. Based on the literature, one would expect women as well as younger people to report higher levels of social anxiety<sup>12-14</sup>. In addition, withdrawal from social situations and an avoidant coping style<sup>15</sup> are hypothesized to be associated with higher levels of social anxiety.

## **METHODS**

### **Study design**

This was a cross-sectional study using medical data from electronic health records and patient reported outcomes.

### **Setting and participants**

The study sample consisted of patients visiting between 2016 and 2020 the Facial Palsy Expert Team at the Department of Otolaryngology-Head and Neck surgery of the Radboud University Medical Center (Radboudumc) Nijmegen, a tertiary care center. Eligible participants were at least 18 years of age and had sufficient knowledge of the Dutch language, and were diagnosed with unilateral facial palsy, as indicated by the International Classification of Diseases code in their electronic health record. Patients who were in active cancer treatment at the time of contacting them were excluded. Eligible patients received a

letter with information about the study and invitation to participate. Patients willing to participate were asked to send an email to the researcher (IS), after which they received an email with a link to questionnaires in a custom made assessment platform (Radquest). Prior to completing the questionnaires, participants had to provide digital informed consent. Participants completed the questionnaires between January and May 2021. Participants who completed the Social Interaction Anxiety Scale (SIAS), the Social Appearance Anxiety Scale (SAAS) and the Brief Coping Orientation to Problems Experienced inventory (Brief-COPE) were included in the present study<sup>16-18</sup>. The medical ethical review committee of the Radboudumc reviewed the study and judged that due to its limited invasive nature, it was exempt from medical ethical review (CMO Arnhem-Nijmegen # 2019-5788).

## Measures

### *Medical variables*

All medical data were extracted from the electronic health records, including aetiology, side of paralysis, and time since onset. The clinical severity of facial palsy was measured using the House-Brackmann scale, a scale based upon functional impairment ranging between 1 (normal) and 6 (no movement) and the Sunnybrook facial grading scale, a comprehensive scale for facial function in people with facial palsy, ranging from 0-100<sup>19</sup>.

### *Sociodemographic variables*

Participants reported sociodemographic information, including age, sex and education level.

### *Social Interaction Anxiety Scale (SIAS)*

The SIAS was developed to assess social interactional anxiety, or the distress that can accompany initiating and maintaining conversations with others<sup>16</sup>. The SIAS-6 is a 6-item, unidimensional measure with response options ranging from 1 (not at all) to 5 (extremely). It was derived from the longer SIAS<sup>20</sup>. A total score is computed from summing

all items, with higher scores indicating greater interactional anxiety. The SIAS is a widely utilized measure of social anxiety that has demonstrated good internal consistency reliability in both clinical (e.g., social phobia, agoraphobia) and non-clinical (e.g., undergraduate) samples<sup>21</sup>.

#### *Social Appearance Anxiety Scale (SAAS)*

The SAAS is a 16-item measure examining fear of situations in which one's appearance will be evaluated<sup>17</sup>. Response options range from 1 (not at all) to 5 (extremely). To calculate a total score, the first item is reverse coded, and then all items are summed. Total scores range from 16 to 80, with higher scores indicating greater fear. The SAAS has been validated in samples with patients with visible differences such as scleroderma<sup>22</sup>.

#### *Coping*

Coping was measured using the 28-item Brief Coping Orientation to Problems Experienced (Brief-COPE) Inventory<sup>18</sup>. Items were scored on a 4-point scale, ranging from 0 (I haven't been doing this at all) to 3 (I've been doing this a lot). The Brief-COPE includes subscales reflecting problem-focused coping, emotion-focused coping and avoidant coping. Higher scores reflect more of the coping strategy being used. The reliability and validity is sufficient across different samples<sup>18</sup>.

#### **Statistical Analysis**

Descriptive statistics were computed for the sample. First, associations between SAAS and SIAS scores and demographic variables were calculated using univariate linear regression. Second, to assess the association of sociodemographic and disease-related variables and coping style with the SIAS and SAAS, separately, we used hierarchical linear regression. Variables included in models were identified *a priori* based on previous studies<sup>12,23</sup> and clinical considerations. Sociodemographic variables (age, sex, and education) were included in step 1. Disease variables (House-Brackmann score

[dichotomous: score 1 to 3 vs. 4 to 6], aetiology [dichotomous: viral facial palsy vs. other], side of palsy, disease duration and Sunnybrook score) were added in step 2. Coping styles (problem-focused coping, emotion-focused coping and avoidant coping) were added in step 3. Missing data were dealt with using multiple imputation via chained equations with 20 imputations, including all variables in the main regression models, plus the SAAS and SIAS.

Unstandardized and standardized regression coefficients with 95% confidence intervals (CIs) were reported, along with total explained variance for each model (adjusted  $R^2$ ). The assumption of normal distribution of residuals in the regression model was tested using a normal probability plot. Additionally, correlations between independent variables and tolerances were calculated to check for multicollinearity. Linearity of the model was assessed using partial residual plot. In sensitivity analyses we did complete case analyses of our models for SIAS and SAAS including only participants without missing data. All regression analyses were conducted using Stata Version 17. For each outcome, hierarchical linear regressions using multiply imputed data were fit using the `mibeta` command.

### **Role of the Funding Source**

No funder had any role in any aspect of study design; data collection, analysis, and interpretation; manuscript drafting; or the decision to submit for publication. The corresponding author had access to all data and final responsibility for the decision to submit for publication.

## **RESULTS**

### **Sample Characteristics**

Based on screening of available electronic health records, 309 patients who met inclusion criteria were identified and were invited to participate. Of these, 130 participants provided informed consent and completed the questionnaires (42%). Nineteen participants were missing all disease variables and were excluded from the present study. In total, 111

participants were included. Forty-six were men (41%) and 65 women (59%; Table 1). Mean age was 58.6 years (SD 13.4) and mean disease duration was 7.9 years (SD 9.2). The majority of the participants (61%) suffered from Bell's Palsy. The mean SIAS score was 16.0 (SD = 11.8) and the mean SAAS score was 36.1 (SD = 16.3).

### **Associations with Social Interaction Anxiety (SIAS)**

Unadjusted associations of sociodemographic and disease variables with SIAS scores are shown in Table 1. In univariate analyses, higher age was associated with lower SIAS scores ( $B = -.34$ , 95% confidence interval [CI]  $-.49$  to  $-.18$ ), while greater use of problem-focused coping ( $B = 7.03$ , 95% CI =  $1.76$  to  $12.30$ ) and avoidant coping ( $B = 6.57$ , 95% CI =  $1.77$  to  $11.37$ ) were significantly associated with higher SIAS scores (more interaction anxiety).

Results from the multivariable hierarchical linear regression analyses are shown in Table 2. The  $R^2$  for the final model was 0.257, and adjusted  $R^2$  was 0.166. Higher age ( $B = -.35$ , 95% CI =  $-.52$  to  $-.17$ ) and greater use of emotion-focused coping ( $B = -10.51$ , 95% CI =  $-20.77$  to  $-.21$ ) were associated with lower SIAS scores. Greater use of avoidant coping ( $B = 7.72$ , 95% CI =  $1.31$  to  $14.09$ ) was significantly associated with higher SIAS scores (more interaction anxiety).

Regression diagnostics found no evidence for deviation from the assumption of normal distribution of residuals based on a partial residual plot. All tolerance values were between 1.08 and 3.35, indicating multicollinearity was not problematic.

### **Associations with Social Appearance Anxiety (SAAS)**

Unadjusted associations of sociodemographic and disease variables with SAAS scores are shown in Table 1. In univariate analyses, higher age ( $B = -.37$ , 95% CI  $-.59$  to  $-.15$ ) and male sex ( $B = -9.44$ , 95% CI  $-15.42$  to  $-3.45$ ) were associated with lower SAAS scores (less appearance anxiety). Having secondary education level, compared to primary education ( $B = 9.81$ , 95% CI =  $.49$  to  $19.13$ ) as well as longer disease duration ( $B = .03$ , 95%

CI = .01 to .06), as well as greater use of problem-focused coping ( $B = 10.51$ , 95% CI = 3.27 to 17.75) and avoidant coping ( $B = 11.56$ , 95% CI = 5.07 to 18.05) were significantly associated with higher SAAS scores (more appearance anxiety).

Results of multivariable hierarchical linear regression analyses are shown in Table 3. The  $R^2$  for the final model was 0.359, and adjusted  $R^2$  was 0.281. Higher age ( $B = -.30$ , 95% CI = -.53 to -.08), male sex ( $B = -7.35$ , 95% CI -13.30 to -1.39) and greater use of emotion-focused coping ( $B = -22.12$ , 95% CI = -35.29 to -8.86) were associated with lower SAAS scores. Greater use of avoidant coping ( $B = 14.40$ , 95% CI = 6.13 to 22.67) was significantly associated with higher SAAS scores (more appearance anxiety).

Regression diagnostics found no evidence for deviation from the assumption of normal distribution of residuals based on a partial residual plot. All tolerance values were between 1.08 and 3.35, indicating multicollinearity was not problematic.

Results from complete case analyses which include 85 participants with no missing data were similar to those from the models using imputed data (appendix tables 1 and 2). The percentage of missing data was low, 18 of 111 (16%) were missing HB scores, 15 of 111 (14%) were missing Sunnybrook scores. There were no missing values for the other variables in the regression model.

## DISCUSSION

The main findings of this study were that higher age and greater use of emotion-focused coping were associated with less social interaction anxiety, whereas greater use of avoidant coping was associated with greater social interaction anxiety in people with unilateral facial palsy. In addition, higher age, male sex and greater use of emotion-focused coping were associated with lower social appearance anxiety, whereas greater use of avoidant coping was associated with greater social appearance anxiety. In both models, the

objective severity of the facial palsy (House-Brackmann and Sunnybrook scores), side of the palsy, aetiology and time since diagnoses were not significantly associated with anxiety.

There are no validated cut-off scores for the SIAS and SAAS that indicate 'severe' levels of social interaction or social appearance anxiety. The mean SIAS and SAAS scores in our sample were similar to levels reported in people with burns<sup>24</sup> and higher than in scleroderma<sup>25</sup> which both are largely defined by changes in appearance. No previous studies have examined factors associated with social interaction and social appearance anxiety in a facial palsy population. Our results are consistent with studies involving people with other visible disfigurements. Among people with cleft, women reported higher appearance-related social anxiety and avoidance than men<sup>26</sup>. Among people with burns<sup>27</sup>, similar to our findings, adjustment is related to personality traits rather than the physical features of the injury.

In both models, avoidant coping, which is characterized by self-distraction, denial, substance use and behavioral disengagement<sup>18</sup> was associated with greater anxiety. While avoidance may reduce anxiety in the short-term, it is a well-known risk and maintaining factor for exacerbating anxiety in the long run<sup>28</sup>. People with facial palsy may try and reduce their appearance anxiety by avoiding social interactions with others altogether, avoid thinking about their facial palsy, or by giving up the attempt to cope with it. This maladaptive, avoidant coping style may be an important target for interventions targeting social appearance concerns among people with facial palsy. In a systematic review it is stated that problem-focused coping is positively associated with better physical and psychological self-care, whereas an emotional approach with escape avoidance was negatively related to adaptive self-care<sup>29</sup>.

Relatively little is known about appearance concerns among people with facial palsy, which is surprising given the central role of the face in social interactions. Studies are needed to understand the course and impact of social interaction and social appearance anxiety over time. An inception cohort, in which people with facial palsy are followed up over a longer

period immediately post-diagnosis will provide important insights into different coping styles and adaptations that people make. We have identified factors linked to social interaction and social appearance anxiety, but additional studies are needed that can more precisely delineate the relative contributions of possibly amendable factors that we have identified, for instance looking at body concealment and social avoidance. Given the limited explained variance of this study, it may be useful to include concepts such as resilience in subsequent studies. Resilience represents the ability to return to the previous so-called 'normal' condition after trauma or illness (Babic, 2020), which could be an important protective factor against appearance-related anxiety. In addition, interventions such as cognitive behavioral therapy (CBT) for appearance anxiety have been developed (Clarke et al., 2014). Such interventions could help people to address appearance and social anxiety concerns by improving adaptive coping strategies.

Clinically, it is important that a patient-centered approach is taken to reduce the effects of individuals' facial palsy on their psychosocial wellbeing. This implies that physicians are aware of the vulnerability of people with a facial palsy, especially in women and younger people, and take into account that the severity of the palsy does not predict the psychosocial suffering. While there are currently no sufficiently tested interventions specifically targeting social anxiety concerns in people with facial palsy<sup>30</sup>, approaches used successfully in other diseases may be helpful<sup>31,32</sup>. Thus, it is important that healthcare providers ask not only about the functional impact of facial palsy, but also about how it interferes with their patients' daily lives and wellbeing. If indicated, physicians should be able to refer for a professional caregiver who is familiar with facial disfigurement<sup>33</sup>. Ultimately, understanding how the facial palsy affects individuals will enable healthcare providers to help patients lead their best lives possible, even if it may not be possible to eliminate the palsy itself.

Strengths of our study include the relatively large sample size for this population, the use of validated questionnaires and the well-described objective medical data. There are also limitations. First, patient-reported outcome measures were collected during the COVID-

19 pandemic which may have influenced the psychosocial outcomes of participants. For instance, participants may have had fewer social interactions and may have been able to avoid other from noticing their palsy by wearing facemasks. For this reason, patients were asked if they thought their psychosocial functioning was affected by COVID-19. Almost all participants (98%) indicated that their responses were unaffected by the pandemic situation. Second, this study was cross-sectional, and no causal relationships could be established. Longitudinal research is needed to identify which factors predict the development of social interaction anxiety and social appearance anxiety over time. The present study could be a starting point in determining which variables to include in longitudinal studies. Third, the response rate was lower than ideal, although this does not deviate substantially from what is often found in questionnaire studies. Potential participants were identified based on their electronic health record, but a substantial number was not currently receiving active treatment at our center. In addition, participants were initially contacted by letter, but after that, everything was done digitally, which may reduce generalizability. Finally, the majority of our sample had Bell's palsy. Future research should ideally include a larger sample with greater diversity in terms of etiology.

In conclusion, younger individuals and women reported more social anxiety concerns, as well as people with an emotion-focused and avoidant coping style. Time since onset and objective severity of the facial palsy were not associated with anxiety. Results underline that attention should be given to psychosocial factors around facial palsy. Our study also points out that physicians should be aware of the subjective impact of the palsy on their patients rather than just focus on objective measures, especially in younger patients and women. If indicated, they should be referred to a medical psychologist or specialized nurse for further assessment and counseling. For the development of psychological interventions, social anxiety and coping could be an important starting point.

**Author contributions**

I.S. and J.C. conceived of the presented idea. I.S. collected the data. I.S., J.C. and L.K. contributed data and performed the analysis. I.S., I.K., C.B., J.C. and L.K. wrote the manuscript.

All co-authors have reviewed and approved the manuscript prior to submission.

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**Table 1. Sociodemographic and disease characteristics among participants with facial palsy (N = 111) and unadjusted associations with SIAS and SAAS**

Variable	Value	Crude regression coefficient SIAS (95 % Confidence Interval)	Crude regression coefficient SAAS (95 % Confidence Interval)
<b>Sociodemographic</b>			
Age in years, mean (SD)	58.6 (13.4)	-.34 (-.49 to -.18)*	-.37 (-.59 to -.15)*
Male sex, n (%)	46 (41.4)	-3.70 (-8.17 to .77)	-9.44 (-15.42 to -3.45)*
Level of education completed, n (%)			
- Primary	15 (13.5)	reference	reference
- Secondary	54 (48.7)	2.8 (-4.06 to 9.66)	9.81 (.49 to 19.13)
- Tertiary	42 (37.8)	3.01 (-4.05 to 10.08)	7.59 (-2.02 to 17.20)
<b>Medical variables</b>			

Etiology, n (%)		-.05 (-4.97 to 4.87)	-1.35 (-8.14 to 5.44)
- Bell's Palsy	68 (61.3)		
- Tumor	9 (8.1)		
- Ramsay Hunt / Herpes Zoster	11 (9.9)		
- Iatrogenic	5 (4.5)		
- Other	18 (16.2)		
Time since onset in years, mean (SD)	7.9 (9.2)	.04 (-.20 to .29)	.41 (.08 to .73)
Facial palsy right, n (%)	60 (54.0)	-.84 (-5.31 to 3.63)	-1.29 (-7.46 to 4.87)
House-Brackmann <sup>a</sup>			
- score 1-3, n (%)	56 (60.2)	reference	reference
- score 4-6, n (%)	37 (39.8)	-.84 (-5.61 to 3.92)	-2.71 (-9.29 to 3.87)
Sunnybrook score, mean (SD) <sup>b</sup>	43.3 (21.2)	-.036 (-.15 to .73)	-.07 (-.22 to .08)
<b>Patient-reported outcomes</b>			
SIAS, mean (SD)	16.0 (11.8)		
SAAS, mean (SD)	36.2 (16.3)	.47 (0.37 to 0.57)	
COPE			
- Problem-focused, mean (SD)	1.2 (.4)	7.03 (1.76 to 12.30)	10.51 (3.27 to 17.75)
- Emotion-focused, mean (SD)	.98 (.3)	2.85 (-4.59 to 10.29)	1.46 (-8.83 to 11.76)
- Avoidant, mean (SD)	.93 (.5)	6.57 (1.77 to 11.37)	11.56 (5.07 to 18.05)

SD: Standard Deviation; SIAS: Social Anxiety Interaction Scale; SAAS: Social Anxiety Appearance Scale; COPE: Coping Orientation to problems Experienced.  
Due to missing values: <sup>a</sup>N = 93; <sup>b</sup>N = 96

\* $p < .05$

**Table 2. Results of the hierarchical linear regression analyses for the Social Interaction Anxiety Scale**

<b>SIAS</b>	<b>Individual variable parameters</b>				<b>Adjusted R<sup>2</sup></b>
Variables	B	[95% CI]	$\beta$	<i>P</i>	
<b>Step 1: sociodemographic variables</b>					0.129
Age	-.34	-.50 to -.175	-0.4	< 0.001	
Male sex	-2.63	-7.05 to 1.79	-.11	0.242	
Education					
- Secondary	-2.16	-9.02 to 4.69	-.09	0.533	
- Tertiary	-2.14	-9.11 to 4.84	-.08	0.545	
<b>Step 2: disease characteristics</b>					0.117
Age	-.36	-.53 to -1.88	-.41	<0.001	
Male sex	-2.65	-7.29 to 1.99	-.11	0.259	
Education					
- Secondary	-2.11	-9.16 to 4.94	-.09	0.554	
- Tertiary	-1.40	-8.80 to 5.99	-.06	0.708	
House-Brackmann	-2.58	-8.50 to 3.34	-.11	0.388	
Viral facial palsy	-.20	-4.97 to 4.57	-.00	0.933	
Palsy right side	-2.88	-7.24 to 1.47	-.12	0.192	
Duration	-.05	-0.29 to .19	-.04	0.701	
Sunnybrook	-.08	-.22 to .06	-.16	0.235	
<b>Step 3: coping style</b>					0.166
Age	-.35	-.52 to -1.74	-.40	<0.001	
Male sex	-2.81	-7.44 to 1.82	-.12	0.231	
Education					
- Secondary	-3.23	-10.46 to 3.99	-.14	0.377	
- Tertiary	-2.60	-10.32 to 5.12	-.11	0.505	
House-Brackmann	-1.79	-7.76 to 4.18	-.07	0.552	
Viral facial palsy	0.55	-4.61 to 4.72	.00	0.981	
Palsy right side	-3.39	-7.68 to .90	-.14	0.120	
Duration	-.08	-.32 to .16	-.06	0.511	

Sunnybrook	-.07	-.21 to .07	-.12	0.348	
Problem coping	2.51	-5.43 to 10.45	.09	0.532	
Emotion coping	-10.51	-20.77 to -.21	-.27	0.045	
Avoidant coping	7.72	1.31 to 14.09	.29	0.019	

**Table 3. Results of the hierarchical linear regression analyses for the Social Appearance Anxiety Scale**

SAAS	Individual variable parameters				Adjusted R <sup>2</sup>
Variables	B	[95% CI]	$\beta$	<i>P</i>	
<b>Step 1: sociodemographic variables</b>					0.125
Age	-.31	-.54 to -.09	-.26	0.007	
Male sex	-7.45	-13.57 to -1.34	-.23	0.017	
Education					
- Secondary	3.02	-6.47 to 12.50	.09	0.530	
- Tertiary	1.41	-8.24 to 11.06	.04	0.773	
<b>Step 2: disease characteristics</b>					0.163
Age	-.31	-.55 to -.08	-.26	0.009	
Male sex	-6.74	-13.01 to -4.80	-.20	0.035	
Education					
- Middle	2.95	-6.60 to 12.49	.09	0.356	
- High	2.07	-7.92 to 12.05	.06	0.682	
House-Brackmann	-6.06	-13.83 to 1.72	-.18	0.125	
Viral facial palsy	-1.75	-8.22 to 4.72	-.05	0.593	
Palsy right side	-3.24	-9.11 to 2.64	-.10	0.277	
Duration	.28	-.04 to .61	.16	0.086	
Sunnybrook	-.17	-.36 to .02	-.23	0.074	
<b>Step 3: coping style</b>					0.281
Age	-.30	-.53 to .08	-.25	0.009	
Male sex	-7.35	-13.30 to -1.39	-.22	0.016	
Education					
- Secondary	1.52	-7.81 to 10.84	.05	0.748	
- Tertiary	.64	-9.30 to 10.58	.02	0.899	

House-Brackmann	-4.50	-11.97 to 2.97	-.14	0.234	
Viral facial palsy	-1.11	-7.13 to 4.92	-.04	0.716	
Palsy right side	-4.02	-9.53 to 1.50	-.12	0.151	
Duration	.21	-.10 to .52	.12	0.178	
Sunnybrook	-.14	-.32 to .04	-.19	0.119	
Problem coping	4.60	-5.59 to 14.77	.12	0.377	
Emotion coping	-22.12	-35.29 to -8.67	-.40	0.001	
Avoidant coping	14.40	6.13 to 22.67	.40	0.001	

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