DEVELOPMENT AND VALIDATION OF THE COPING STRATEGIES QUESTIONNAIRE FOR PARENTS OF CHILDREN WITH DIABETES

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This study describes the development and validation of the COPING STRATEGIES FOR DIABETES CARE (CSDC) questionnaire for parents of children and adolescents with diabetes.

**Study 1. Item development and initial testing**
- Review coping measures
- Interview 20 parents
- Experts developed a initial pool of 86 items
- Item pool was reviewed by 4 experts (40 items)

**COPING STRATEGIES FOR DIABETES CARE (CSDC) Questionnaire**
The CSDC assesses how often parents do or think different things when they feel stressed about their child’s illness (9-point Likert scale, never = 0 to always = 8)

**Study 2. Scale refinement and construct validity**
- COPING STRATEGIES FOR DIABETES CARE (CSDC) Questionnaire 18 items
  - How often parents do or think different things when they feel stressed about their child’s illness (5-point Likert scale, never = 0 to always = 4)
- Confirmatory Factor Analysis (CFA)
  - 199 parents (55.2% mothers/44.8% fathers)

**Study 3. Concurrent Validity and Gender Differences**
- Participants: Data were collected from 109 parents (62 mothers and 47 fathers, 39 couples) of children and adolescents with diabetes
  - Parents (N = 109)
    - Gender: Female = 57.50%, Male = 42.50%
    - Age, M (SD): 43.68 (5.62)
    - Educational level: Primary = 15.1%, Secondary = 29.2%, Higher education = 53.9%, Missing data = 1.8%
  - Children and adolescents (N = 77)
    - Age (range): 5-17 years
    - Duration of diabetes (range): 1-13 years
    - HbA₁c (% range): 5.20-12.50

**Results**
- The final questionnaire consisted of 15 items. Confirmatory Factor Analyses (AMOS, 2005) revealed a 5-factor structure [CMIN= 125.5, d.f. = 78, p<.001; RMR= .08 GFI=. 92; CFI=.96]: planful problem solving/active control (4 items), social support seeking (3 items), negative emotional expression (4 items), wishful thinking (2 items), and religious strategies (2 items). Multigroup analysis (mothers/fathers) confirmed this structure.

- CSDC factors showed adequate internal consistency. Cronbach’s alpha for the subscales in study 3 ranged from 0.72 (social support seeking) to 0.84 (religious thinking).

**Measures**
- Parents completed a survey questionnaire containing the following measures:
  - **Demographic and Illness Information.** Parents provided information on demographics (age, education, children’s age, etc.) and children’s diabetes (duration, treatment regimen, age at diagnosis, metabolic control).
  - **The Coping Strategies for Diabetes Care Questionnaire-Parents Form.** 15 items assessing how often they did or thought different things when they felt stressed about their child’s illness (5-point Likert scale ranging from never = 0 to very often = 4)
  - **The WHO-Five Well-Being Index (WHO, 1998).** Five items which covered positive mood (good spirits, relaxation), vitality (being active and waking up fresh and rested), and general interests (being interested in things). Each of the five items is rated on a 6-point Likert scale from 0 (= not present) to 5 (= constantly present). Higher scores mean better well-being.

**Discussion**
- Findings showed support for the validity of a brief measure for using in research and clinical settings.
  - These data are in line with previous research on gender differences in coping. Our findings underline the importance of assessing potential differences in ways of coping among family members.

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