Quality of dyadic relationship in Swedish men and women living in long-term relationships and in couples in family counselling – Introduction of a new self-report measure, QDR36.

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#### ABSTRACT

There has long been a need for a well-balanced, comprehensive and up-dated self-report measure of dyadic relationship quality. The aim was to test the new Quality of Dyadic Relationship, QDR, on 90 men and women living in long-term relationships and on 94 men and women constituting 47 couples visiting family counselling. In the first group A, the experienced entire quality of the relationship, QDR index, was found to be 22, with a possible range between 5 and 30, which means rather a good quality in the relationship. The dimension Dyadic Consensus showed the highest marks together with Dyadic Satisfaction, indicating that these men and women did not just stay together by force of habit. In group B, the QDR-index was 20 before and 22 after counselling. Dyadic Sexuality was found to be lowest in both group A and B. QDR seems to be an instrument with good validity and reliability also in these study groups, according to the factor structure and Cronbach's alpha. The entire QDR36 is hereby introduced and presented ready for use in different kinds of relationships.

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#### INTRODUCTION

There are few studies about long-term relationships and about why couples succeed in staying together for more than 20 years<sup>5</sup>. To study what characterizes stable relationships is as important as to study what contributes to separations in couples. A well- functioning and happy marital relationship is known to consist of the following: mutual responsibility and engagement in the relation, agreements problems can be solved in a good way, mutual care and intimacy, open and ongoing communication and mutual activities in which both are engaged. These factors result in mutual satisfaction and a feeling of togetherness and intimacy (Baucom, Epstein & La Tillade, 2002). Low satisfaction in a marital relation includes negative expressions, lack of cohesion, emotional distance and difficulties in communicating, solving problems and conflicts (Burman & Margolin, 1992). This may be the situation in couples visiting family counseling.

Weigel and Ballard-Reisch (1999) describe how the use of relationship maintenance behaviours in marriages may vary during time. Data were collected from 143 heterosexual married couples. The hypothesis was that engagement in behaviours of positivity, openness, assurances and engagement in networks and tasks would decline with the length of marriage. Findings indicate that the use of these maintenance behaviours, fostering positive perceptions of the relationship, displayed a curvilinear pattern; marital quality tended to peak in the first years of marriage and then decline until midlife, while it increased again in long-term marriages. The results of this study suggest that wives and husbands use maintenance behaviours for different reasons and the authors ask for additional research. This curvilinear U- shape described by Weigel and Ballard-Reisch (1999) is guestioned by Van Laningham, Johnson, & Amato (2001), who claim that earlier data are usually cross-sectional and, when using a model of pool-time series with multiple wave data, there is no support for an upturn in marital happiness in later years. When other life-course variables were controlled, a significant negative effect by marital duration on marital happiness remained as being more typical of US marriages. The effects of parenthood are not described in this study by Van Laningham et al. (2001), making the trajectories even more complex and complicated to evaluate. During a ten-year period, Kurdek (1999) found that marital

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quality declined fairly rapidly over the first four years, then stabilized and then declined again in about the eighth year of marriage.

Quality of a dyadic relationship and love can be seen as consisting of three components; intimacy, passion and commitment (Kurdek 1999). Kurdek discusses the possibility that different components of marital quality change in different ways. Passion, for instance, may decline most quickly, because of its initial high extremes, like a "honeymoon is over effect", while commitment may actually increase over time.

Arriaga and Agnew (2001) describe the state of relationship commitment using a systematic empirical examination in two longitudinal studies. Commitment is here defined as three distinct components: a. psychological attachment (affective component), b. long-term orientation regarding the relationship (cognitive component), and c. intention to persist in the relationship (motivational component). These three components predict the marital satisfaction and the stability of the relationship. The authors state that the cognitive component long-term orientation seems to be particularly important for the sustaining of the relationship.

Long-term relationships were described by Hansson et al. (1994), where 95 couples that were satisfied in their marriages were compared with couples of long term marriages that were less satisfied, (according to a question of happiness in the dimension satisfaction). The differences between those reporting high versus low marital satisfaction were significant regarding consensus about the following: use of leisure time, sex, philosophy of life, and time together as well as frequency of quarrelling in the dimension satisfaction.

Hansson et al. used the self-rating instrument known as Dyadic Adjustment Scale, DAS, (Spanier, 1976). Among first-time parents at six months after delivery, a modified and complemented version of DAS was used (Ahlborg, Dahlof & Hallberg, 2005a). The reason for the modification of DAS was that the original DAS had been criticized, but it was still the instrument that was used to measure marital satisfaction, which shows the difficulty of assessing the very complex dyadic quality in an intimate couple relationship (Ahlborg et al., 2005b). Spanier (1979) did not regard DAS as a measure of marital satisfaction, as he wrote in 1976, but as a multidimensional measure of marital adjustment and Eddy (1991) claimed that marital adjustment and satisfaction are not synonymous. Another critic of DAS has been that the subscale/dimension Consensus is so dominant in the instrument, which makes it hard to explain why there should be four subscales/dimensions, instead of one general (Kazak, Jarmas & Snitzer, 1988). DAS has also been criticized for having a varying number of questions in the subscales/ dimensions and a varying numbers of response alternatives, which leads to inappropriate and inaccurate weights (Norton, 1983).

The instrument was thus modified and revised by adding questions concern-

ing the couples' dyadic communication, sensuality and sexuality to the other subscales/dimensions (Ahlborg et al., 2005a). These new subscales/dimensions were a result of interview studies with people who had become parents 6, 9 and 18 months earlier (Ahlborg, Dahlöf & Strandmark, 2000; Ahlborg & Strandmark, 2001). The form of communication was a main result of how the parents experienced the couple relationship. After adding these variables, the subscale/dimension Consensus was not as dominant as in the original version of DAS. The new instrument is called Quality of Dyadic Relationship, QDR, after validation with factor analysis and multitrait analysis program, MAP (Ware et al., 1997), where it showed good internal consistency and discriminatory validity (Ahlborg, Persson & Hallberg, 2005b). This new instrument needs to be tested on long-term couples and in other populations.

The aim of this study was to describe the experienced quality of the marital relationship among A. Men and women living in long-term relationships and B. Couples visiting family counselling, and to discover if QDR is an adequate and valid instrument for measuring marital quality in these study groups.

#### METHOD

#### Measurement

QDR with 35 items and 36 items respectively were used in this study. Question 36 is about how committed the individual partners are to do all they can to make the relationship last. In the study among new parents (Ahlborg et al., 2005a), this question had low validity, (r<.40), and therefore was not included in group A. However, when QDR was tested on couples in family counselling after that, this item was very relevant. Now in the future there will be only one version of QDR, comprising 36 items. This version is presented as Appendix at the end of this article. QDR36 as well as QDR35 has a possible range of the index of marital quality between 5 and 30. QDR has been translated into Swedish and English back again using the back translation method (White & Elander, 1992).

#### Participants and procedure – group A.

The study group was based on a convenience sample. Unknown friends and colleagues, and their friends, of the husband of the data collecting midwife were contacted and asked to respond the QDR-questionnaire together with eight background variables, altogether 44 questions. Attached was a cover letter as well as an envelope, prepared with stamps for the answered questionnaire. The inclusion criteria were the following:

 Having been living together or married to a partner of opposite sex for more than 20 years

- Being of working age

No reminding letter was sent out, as the responders deliberately were unknown to the data collecting midwife. One hundred questionnaires were distributed, 50 per men and 50 per women. The response rate was 90%, meaning 46 men and 44 women answering. None of the responding men and women constituted couples, and data will therefore be analyzed on an individual level.

The men in the study group were older than the women, had longer relationships and were more often married than the women. Twice as many women than men had more than three children. Three times as many women had an academic education, and more of the women had work corresponding to their education. All men but only half of the women worked full time.

#### Participants and procedure – group B.

B. All couples (all of whom were heterosexual) visiting the municipal couple/ family counselling agency in a medium-sized Swedish city in 2006, were asked to fill out the QDR 36 questionnaire at the beginning of the counselling period, and again after counselling was finished. The inclusion criteria included that the respondents understood Swedish well enough to answer the questionnaire, and that they were living together as a couple. Couples in cases where the counsellors were aware of domestic violence were excluded, due to problematic situations and the people involved being negatively affected. 140 couples responded to the first questionnaire. In order to qualify to answer the questionnaire the second time after counselling had finished, the couples were to have made at least two visits to the counselling agency, and were to still living together as a couple. 46.6% of the couples fulfilling the initial inclusion criteria did not qualify to complete the second questionnaire. In total, 47 couples responded at the second assessment.

The consecutively coded questionnaires were given to the couples at the first visit. The forms were marked with therapist A, B and C beside the number and markings "before" or "after" counseling. The couples filled it out, men and women separately, sitting calmly at the counseling agency without the presence of the therapist. However, the therapist was available if anyone had questions about the form. The form was then put in an envelope sealed by the respondents themselves. Also the second time, most forms were filled out while the couple remained at the counseling office. For practical reasons, the questionnaire could also be sent home to the respondents. The QDR questionnaire was accompanied by the contentment form and some demographic questions at the second occasion of measurement.

#### Ethical considerations – group A

The responding men and women did not constitute any couples, and this was for ethical reasons. The researching midwife did not have the possibility and resources to take care of any conflicts or private problematic situations between the partners of a couple, which could have been the consequences of both partners in the couples responding.

The responders were deliberately unknown to the data collecting midwife, and her husband, who helped to distribute the questionnaires, never saw any of the unidentifiable responses. The responders were informed about the study and its purpose by a cover letter and not pushed to cooperate, but filled in the form voluntarily, and for some it took a long time, but they were not reminded.

#### Ethical considerations – group B

The couples were informed of the aim of the study and that it was part of the family counselling's development and quality work. The cover letter explained that the questionnaire would be evaluated scientifically on group level, and that each individual's answers were anonymous to the reader. Respondents were informed that the code numbers of the questionnaires were for their own safety and that the code lists with the names, addresses and code numbers were kept safe at the family counselling office, and that the information could not be used for any other purpose than this study. The couples were verbally informed about voluntariness concerning participation during their first visit. On their own initiative the couples could talk to the family counsellor about any thoughts or questions concerning the questionnaire.

#### Data analyses

Descriptive and inference statistics of the means and medians of the responding men and women was performed in SPSS 14.0 and 15.0. Index of Marital quality was computed by summarizing the means of the five dimensions of QDR. Comparisons between the sexes was conducted with the non-parametric Mann Whitney U-test, as the sample was too small to be regarded as normally distributed, and the categorical data with ordinal scales of Likert–type could not be assumed to have equal distance. In study group B, comparison before and after counseling was conducted with the non-parametric Wilcoxon Signed rank test. When significant differences between the sexes were found. Effect size was computed. Effect size was calculated for every dimension and the total QDR index. Effect sizes to show clinical relevance of the significant mean differences were counted according to Cohen (1988), where more than .5 is a difference of clinical relevance.

To discover if QDR could be appropriate to measure marital quality in this study group of long-term relationships as well as in couples turning to family counselling, the reliability of the different dimensions was checked with Cronbach's alpha. The validity of QDR in this study group was checked with factor analysis. In the factor analysis, Kaisers criterion was followed, meaning only factors with Eigenvalues >1 were retained and only variables with correlations >.3 should remain in the factor structure. A scree plot was made and Oblimin rotation was performed as is recommended by Pallant (2005).

#### RESULTS – group A

The experienced entire marital quality did not differ between genders and QDR index was 22, with a possible range between 5 and 30 that means a rather good quality in relationship. The dimension Dyadic Consensus showed the highest marks with a mean of 5 out of possible 6 for both men and women. Consensus about leisure time, philosophy of life, and time together showed all high means, around 5. The dimension Dyadic Sexuality was measured lowest with a mean of 3.84 for women and 3.80 for men, and with a non-significant difference between genders, see Table 1a. Concerning the variable sexual desire, men had higher mean indicating higher frequency of sexual desire than the women in the study group, (Table 1a). The means of Dyadic Cohesion and Dyadic Sensuality for women were 4.22 and 4.34 respectively that is somewhere in between Dyadic Satisfaction and Dyadic Sexuality.

When it comes to Dyadic Satisfaction, the men in general were significantly more satisfied with the relationship than the women, see Table 1a. This was regarding quarreling with mate, getting on each others' nerves and misunderstandings in communication that men in the study group estimated to be less frequent than the women. The men also thought that things between the partners more often were going well than the women did.

Dimensions and variables	Wome	en		Men	Men			
of QDR differing between	n = 44	ļ		n = 46	n = 46			
genders	Mean	(SD)	Md	Mean	(SD)	Md		
Dyadic Consensus	4.95	(.45)	5.00	5.09	(.56)	5.17	NS	
Dyadic Cohesion	4.22	(.97)	4.25	4.18	(1.11)	4.25	NS	
Dyadic Satisfaction	4.64	(.66)	4.65	4.88	(.53)	4.90	NS	
17. In general, how often do you think that things between you and your partner are going well?	4.52	(.85)	5.00	4.96	(.76)	5.00	.016*	
20. How often do you and your partner quarrel?	4.43	(.63)	4.00	4.87	(.58)	5.00	.001**	
21. How often do you and your mate get on each other's nerves?	4.43	(1.00)	4.00	5.09	(.63)	5.00	.001**	
23. How often do you misunder- stand each other?	4.32	(.67)	4.00	4.54	(.69)	5.00	.041*	
Dyadic Sensuality	4.34	(1.01)	4.30	4.28	(.61)	3.88	NS	
Dyadic Sexuality	3.84	(.58)	3.75	3.80	(.61)	3.88	NS	
31.How often do you feel sexual desire?	3.43	(.73)	3.00	3.77	(.86)	4.00	.014*	
QDR Index	21.99	22.23	NS					

Table 1a. Inference statistics of the means and medians of Quality of Dyadic Relationship, QDR, in responding men and women living in long term relationships. (N = 90), Mann-Whitney U- test

\*p<.05, \*\*p<.01, \*\*\*p<.001.

### RESULTS – group B

Analysis using Wilcoxon signed-rank test showed significant differences between pre- and post-assessment, in that couples experienced higher quality in their relationships after family counselling; this observation was made in all subscales/ dimensions. Effect size was moderate to great regarding the dimensions of dyadic consensus and satisfaction. For the QDR index as a whole, see Table 1b. The QDR index was 19.6 before counselling and 21.9 after counselling, as shown in Table 1b.

	Pre-assessment			Post-assessment						
	М	(SD)	Md	М	(SD)	Md	Z	р	effect size	(r)
QDR index	19.61	(3.29)	19.62	21.88	(2.86)	22.26		4.60	< 0.001	.48
Consensus	4.52	(0.51)	4.58	4.88	(0.40)	4.96		4.33	< 0.001	.45
Cohesion	3.58	(0.81)	3.50	4.14	(0.70)	4.25		3.98	< 0.001	.41
Satisfaction	3.94	(0.56)	3.82	4.46	(0.51)	4.45		5.23	< 0.001	.54
Sensuality	4.13	(1.15)	4.10	4.64	(0.93)	4.80		3.47	< 0.001	.36
Sexuality	3.44	(0.94)	3.25	3.76	(0.80)	3.75		2.97	0.002	.31

Table 1b. Values of marital quality (QDR index) and its dimensions before and after intervention of family counseling. Wilcoxon signed- rank test. n=94

When it comes to Commitment, described in item 36, the means increased slightly from before and after counseling, (m=4.88, SD=.91, Md=5.0 and m=5.09, SD=.88, Md=5.0), with possible means between 1-6. Thus the commitment of the couples was rather strong already when they started the counselling.

The contentment form showed that the most common reason for the couples to seek help by family counselling was difficulties with verbal communication (58%), the second most common being problems to cooperate in the relationship (48%). The couples expected to get advice and support (79%), and the majority felt they had received the help they expected; "absolutely" (63%) and "to some extent" (33%). Only 2% answered "not at all".

The other objective was to determine whether QDR is an instrument with good reliability and validity for these populations of long term relationships and couples visiting family counselling. All subscales/dimensions showed good reliability by high values of Cronbach's alpha (.79 -.92) except the dimension sexuality that had an alpha value of 0.54 in group A, and in group B it was 0.56 before and 0.66 after counselling, see Table 2a and 2b.

Table 2a. Psychometric properties of QDR in men and women living in long-term relation-
ships, a five structure solution, Oblimin rotation methoda.

Factors/dimensions (rotated pattern)	Factor loadings (highest)
Items	(mgnest)
Dyadic Consensus	
Alpha coefficient	.86
Explained variance (cumulative %)	21.56
1. Handling family finances	.41
2. Matters of recreation	.41
3. Company with friends	.68
4. Appropriate behavior in other persons' company	.66

<ul> <li>5. Values and religious matters</li> <li>6. Ways of dealing with parents, in-laws and other relatives</li> <li>7. Aims, goals, and things believed important</li> <li>8. Amount of time spent together</li> <li>9. Making major decisions</li> <li>10. Household tasks</li> <li>11. Leisure time activities and recreation</li> <li>12. Decisions about career and personal development</li> </ul>	.54 .60 .56 .48 .68 .51 .37 .64
Dyadic Cohesion Alpha coefficient Explained variance (cumulative %) 13. Have a stimulating exchange of ideas	.89 34.46 .80 .79
<ul><li>14. Laugh together</li><li>15. Calmly discuss something</li><li>16.Work together on a project</li></ul>	.79 .84 .77
Dyadic Satisfaction Alpha coefficient	.86
Explained variance (cumulative %)	47.02
<ul><li>17. How often have you discussed or considered divorce/separation?</li><li>18. In general, how often do you think that things between you and your partner are going well?</li></ul>	7.69 7.66
19. Do you confide in your mate?	.51
20. Does it happen that you regret marrying/moving together?	.46
21. How often do you and your partner quarrel?	7.60
22. How often do you and your mate get on each other's nerves?	7.66
23. How often do you listen to the expressed wishes of your partner?	.63
24. How often do you misunderstand each other?	7.57
<ul><li>25. How often is it a problem in your relationship that you or your partner do not show love and appreciation?</li><li>26. The alternatives below represent different degrees of happiness in your</li></ul>	.31 .43
relationship. Mark the alternative which best correlates with the degree of happiness, all things considered, of your relationship.	.45
Dyadic Sensuality	
Alpha coefficient	.92
Explained variance (cumulative %)	53.53
27. How often do you hug your partner now?	.75
28. How often do you kiss your partner?	.62
29. How often do you wish to hug and cuddle your partner?	.70
30. How often in the last 4 weeks have you and your partner been hugging and cuddling?	.69
31. How often does this (question 30) apply to your wishes?	.45
Dyadic Sexuality	
Alpha coefficient	.54
Explained variance (cumulative %)	58.12
32. How often do you feel sexual desire?	.75
33. How often is it a problem that one of you is too tired for sex?	.33
34. How often during the last 4 weeks have you had sexual intercourse?	.49

35. How often does this (question 34) approve to your wishes?	.63
QDR as a whole	
Alpha coefficient	.82
Explained variance (cumulative %)	58.12

 $^{a}N = 90$ 

Table 2b. Psychometric properties of QDR-36 in couples before and after family counselling, a five structure solution, Oblimin rotation method. n = 94

Factors/dimensions			(highes	oadings t) I pattern)
Items	Before	After	Before	•
Dyadic Consensus				
Alpha coefficient	.85	.83		
Explained variance (cumulative %)	16.83	15.36		
1. Handling family finances			.54	.34
2. Matters of recreation			.46	.40
3. Company with friends			.47	.49
4. Appropriate behavior in other persons' company			.46	.60
5. Life philosophy and religious matters			.41	.73
6. Ways of dealing with parents, in-laws and other relati	ves		.60	.39
7. Aims, goals, and things believed important			.61	.64
8. Amount of time spent together			.73	.63
9. Making major decisions			.70	.49
10.Household tasks			.48	.47
11. Leisure time activities and recreation			.67	.71
12. Decisions about career and personal development			.45	.68
Dyadic Cohesion				
Alpha coefficient	.79	.84		
Explained variance (cumulative %)	29.30	29.35		
13. Have a stimulating exchange of ideas			.35	.55
14.Laugh together			.55	.43
15. Calmly discuss something			.45	.49
16. Work together on a project			.55	.38
Dyadic Satisfaction				
Alpha coefficient	.86	.85		
Explained variance (cumulative %)	39.14	41.85		
•			-	
17. How often have you discussed or considered divorce	•		.76	.54
18. In general, how often do you think that things betwee partner are going well?	en you an	d your	.44	.40
19. Do you confide in your mate?			.46	.32
20. Does it happen that you regret marrying/moving toge	ether?		.39	.35
21. How often do you and your partner quarrel?			.83	.75
22. How often do you and your mate get on each other's	nerves?		.68	.57

<ul><li>23. How often do you listen to the expressed wishes of</li><li>24. How often do you misunderstand each other?</li><li>25. How often is it a problem in your relationship that you</li></ul>		.31 .76 .42	.56 .63 .58	
do not show love and appreciation? 26. The alternatives below represent different degrees o relationship. Mark the alternative which best correlates happiness, all things considered, of your relationship.	.49	.45		
Dyadic Sensuality				
Alpha coefficient	.88	.84		
Explained variance (cumulative %)	46.99	50.04		
27. How often do you hug your partner now?			.34	.80
28. How often do you kiss your partner?			.32	.73
29. How often do you wish to hug and cuddle your par	tner?		.84	.83
30. How often in the last 4 weeks have you and your pand cuddling?	artner been	hugging	.48	.69
31. How often does this (question 30) apply to your wis		.78	.68	
Dyadic Sexuality				
Alpha coefficient	.56	.66		
Explained variance (cumulative %)	54.24	55.27		
32. How often do you feel sexual desire?			.78	.68
33. How often is it a problem that one of you is too tire	d for sex?		.56	.80
34. How often during the last 4 weeks have you had se		ourse?	.54	.50
35. How often does this (question 34) approve to your	wishes?		.78	.76
36. Which of the following statements best describes he	about	.66	.47	
the future of your relationship?				
QDR as a whole				
Alpha coefficient	.79	.80		
Explained variance (cumulative %)	54.24	55.27		

The factor analysis showed good convergent validity as all variables had a factor loading over .3, (between .31 – .87). The scree plot in both groups became flat mainly after five components, while this number of components was retained. The factor structure corresponded rather well with the one made in Ahlborg et al. (2005b). Then the factor structure was checked with Multitrait Analysis Program, MAP, and the total explained variance was 50 % on that study group of first-time parents. Now it was higher, the total explained variance was 58.1% in group A and in group B it was 54.2% before and 55.3% after counselling. In the present studies, the factors structure showed good discriminant validity meaning low correlations between the factors of <.38 between the five different factors/dimensions in group A, and in group B it was <.47 before and <.37 after counselling.

When using the QDR36 in family counselling, the counsellors had received questions about two variables that had been difficult for the men and women

to understand, "conventionality" and "life philosophy" in the Dyadic Consensus dimension. Therefore, in Appendix 1, where QDR 36 is presented for future use, "conventionality" is taken out from variable 3 and the word "philosophy of life" is replaced by "values and religious matters" in variable 4. Two variables that have approximately the same meaning have, in the final version in Appendix 1, been compiled to one single variable. These are "Matters of recreation" and "Leisure time interests and activities", now being combined to one variable: "Leisure time activities and recreation", number 10. This fusion made it possible to add one variable in the Sexuality dimension, asked for by family therapists testing QDR, since it was a common problem, namely a special kind of communication: "How often do you think your partner pays attention to your sexual desires?", which is now item 35.

The item 19, "Do you ever regret that you married or lived together?", scored the lowest factor loading (0.32) and is somewhat similar to item 16. Therefore it is now in the final QDR36 be replaced by: "How often do you think your partner takes his/her responsibility?" as the factor loading was that low and responsibility has not been included at all in DAS or QDR. The question about happiness, being item 26 in the dimension Dyadic Satisfaction while the study was performed, is rather similar to the entire mean of the Dyadic Satisfaction. Therefore this item was replaced by an item about consolation and support from the partner that also was missing in the DAS and earlier QDR. See Appendix 1, manual of QDR36, also possible to get in a Swedish version.

QDR has been studied in other populations, for an overview see Table 3. The QDR index in group A was rather similar to couples after family counseling therapy. Women on long-term sick-leave, new parents and the same parents four years later experienced somewhat higher marital quality compared to the long-term relationships.

QDR M	(Md)	N	М,	(SD)	Md	Alpha coefficient
		94				
			4.52	(0.51)	4.58	.85
			3.58	(0.81)	3.50	.79
			3.94	(0.56)	3.82	.86
			4.13	(1.15)	4.10	.88
			3.44	(0.94)	3.25	.56
19.61	(19.25)					.79
	Ň	Ň	<u>M</u> 94	M 94 94 4.52 3.58 3.94 4.13 3.44	M 94 4.52 (0.51) 3.58 (0.81) 3.94 (0.56) 4.13 (1.15) 3.44 (0.94)	M 94 94 4.52 (0.51) 4.58 3.58 (0.81) 3.50 3.94 (0.56) 3.82 4.13 (1.15) 4.10 3.44 (0.94) 3.25

Table 3. QDR-indexes, means and alpha-coefficients in different samples

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Couples at Family counselling After therapy (Present data) Dyadic Consensus Dyadic Cohesion Dyadic Satisfaction Dyadic Sensuality Dyadic Sexuality Total QDR-index	21.88	(22.21)	94	4.88 4.14 4.46 4.64 3.76	(.40) (.70) (.51) (.93) (.80)	4.96 4.25 4.45 4.80 3.75	.83 .84 .85 .84 .66 .80
Men and women living in <i>Long-term relationships.</i> (Present data) Men			90				
Dyadic Consensus Dyadic Cohesion Dyadic Satisfaction Dyadic Sensuality Dyadic Sexuality Total QDR Index	22.23	(22.08)		5.09 4.18 4.88 4.28 3.80	(.56) (1.11) (.53) (.61) (.61)	5.17 4.25 4.90 3.88 3.88	.86 .89 .86 .92 .54 .82
Men and women living in Long-term relationships. (Present data) Women			90				
Dyadic Consensus Dyadic Cohesion Dyadic Satisfaction Dyadic Sensuality Dyadic Sexuality Total QDR Index	21.99	(21.95)		4.95 4.22 4.64 4.34 3.84	(.45) (.97) (.66) (1.01) (.58)	5.00 4.25 4.65 4.30 3.75	.86 .89 .86 .92 .54 .82
Women on long-term <i>sick-leave &gt; 6 months</i> (musculoskeletal and mental s	ymptom	s)	327				
(Submitted data) Dyadic Consensus Dyadic Cohesion Dyadic Satisfaction Dyadic Sensuality Dyadic Sexuality Total QDR-index	23.05	(23.00)		4.93 4.44 4.67 4.59 3.72	(.67) (1.00) (.67) (1.30) (1.10)	5.00 4.50 4.80 5.00 4.00	.80
First-time parents 3½ months after delivery (Submitted data) Dyadic Consensus Dyadic Cohesion Dyadic Satisfaction Dyadic Sensuality Dyadic Sexuality Total QDR-index	23.43	(23.78)	1455	5.08 4.72 5.06 4.96 3.61	(0.55) (0.82) (0.54) (0.85) (0.82)	5.08 4.75 5.20 5.00 3.75	.87 .82 .87 .86 .58 .78

<i>First-time parents, being couple</i> 6 months after childbirth (Published data)	es*		768				
Dyadic Consensus				5.03	(.50)	5.00	.87
Dyadic Cohesion				4.62	(.77)	4.50	.77
Dyadic Satisfaction				5.03	(.60)	5.11	.87
Dyadic Sensuality				5.10	(.82)	5.33	.82
Dyadic Sexuality				3.43	(.88)	3.50	.64
Total QDR-index	23.21	(23.44)					.79
First-time parents, being couple 4 years after childbirth, a follow (Published data)			368				
Dyadic Consensus				4.97	(.51)	4.92	.84
Dyadic Cohesion				4.62	(.77)	4.50	.83
Dyadic Satisfaction				5.03	(.60)	5.11	.83
Dyadic Sensuality				4.69	(.91)	4.67	.83
Dyadic Sexuality				3.43	(.88)	3.50	.84
Total QDR-index	22.78	(22.74)					.83

\*QDR-questions remaining from modified DAS, recounted to the QDR-scale

#### DISCUSSION

When looking at the experienced marital quality among these men and women in long-term relationships, the Dyadic Consensus showed the highest means, and it is possible to assume that when you agree on things, it is easy to stay together for a longer time. Consensus about leisure time, philosophy of life, and time together all showed high means, as in the study of Hansson et al. (1994). However, the Cohesion could be as important and in this population, the Dyadic Sensuality had higher means than the Cohesion. In describing well-functioning relationships (Baucom et al. 2002), "mutual care and intimacy" was mentioned, which could be covered by this sensuality.

The Satisfaction dimension including varying items such as: "How often do you and your partner quarrel?" and "Do you confide in your mate?" and items about degree of happiness and the couple's communication had the second highest means. This may indicate that the men and women in the study group A do not just stay together by force of habit, or because they do not dare to break up, but instead they stay together mainly because they are satisfied with their relationships. The men in this present study were more satisfied with their relationship than the women. This gender difference was also described in the study of longterm relationships by Hansson et al. (1995). This could be associated with the fact that men benefit from marital status and do not react emotionally unless problems are severe enough to threaten this, according to Gove, Hughes and Style (1983). This might mean more than the differing education level between the genders in the present study. The gender difference is also supported by Ahlborg et al., (2005a) where the fathers were more satisfied with the relationship in general than the mothers were.

Weigel and Ballard-Reisch (1999) described the relationship developing in a U-shaped pattern with an increase of marital quality again in long-term marriages. The rather high marital quality measured in this sample of long-term relationships could support that. On the other hand, when the items of QDR with six response alternatives remaining from the modified DAS in the study population of first-time parents, is compared with the high QDR value of long-term marriages, one may state that the change in marital quality over time, as described by Kurdek (1999) is supported: marital quality declined fairly rapidly over the first four years, then stabilized and then declined again in about the eighth year of marriage. Actually this is described in the studies from first child being four years and 6 months (Ahlborg et al. 2005a, Ahlborg, Rudeblad, Linnér & Linton, 2008). A new follow-up of these parents is planned when the first child is eight years old. Could it be that if the relationship lasts for a longer period than eight or ten years, it may stabilize and remain rather good if the relationship lasts more than 20 years? Our result with an index of 22 may support that assumption.

Unfortunately, an item about commitment was not included in the study group of long-term marriages, but it will be in the final version of QDR36. The examination of commitment is useful for understanding how and why some relationships endure and others end according to Arriaga & Agnew (2001). Long-term orientation regarding the relationship as the cognitive component of commitment was described as being of special importance by Arriaga & Agnew (2001). We could assume that the commitment item should have had rather high scores also in this sample of long-term marriages.

Communication problems, predominantly misunderstandings and ineffective communication, are a common source of interpersonal conflicts within the family and the couple relationship. Failing communication can result in frustration and anxiety when expectations and wishes are not fulfilled (Burlesen & Denton, 1997). According to Burleson and Denton (1997) the parties' inability to admit and put across their problems and concerns to each other are the main problems for those who seek professional help. The inability to communicate could possibly result in problems arising in other areas like sensuality and sexuality. At the same time it could be the opposite: there is a problem in the sexual life, but the couple cannot talk about it, and for that reason problems arise. According to this study, the contentment formula showed that most of the people seeking family counselling had communication and/or sexual problems. Furthermore, the family counsellors ascertained that difficulties in communication about sexuality were a common problem with the clients.

A limitation in the study group A is that the result is not presented on a couple level. However, in the sample of couples at family counselling and the parents with first child of six months and four years, the result of QDR is described on a couple level, see Table 3.

Another limitation in group B was, as for some other studies, that it is difficult to determine whether or not it is the family counselling that causes the improvement in the couple relationship, as there is no control group. However, as the effect size is medium to large in all subscales/dimensions, it is more likely that it is the family counselling that brings about this change, rather than a natural development over time, and the contentment form showed that most couples were satisfied with the counselling.

# The QDR-questionnaire

In the development of QDR36, one item about responsibility was added to the final version of QDR36. The importance of forgiveness in marriage was studied by Fincham, Paleari & Regalia (2002). They found, contrary to predictions, that positive marital quality was not directly linked to emotional empathy or forgiveness, but related only indirectly in a causal chain, where responsibility attributions played the main role. Therefore this item of taken responsibility was added instead of one item about forgiveness. Baucom et al. (2002) mention "mutual responsibility and engagement in the relation", as parts of a well-functioning relation, which strengthens the reason to include responsibility in the QDR.

The added item (35) in the dimension Sexuality may give that dimension/factor better reliability. Preliminary data in a pilot study of 30 year old women with and without children, where this final version of QDR36 was tested, showed namely high Cronbach's alpha values also for dyadic Sexuality (.75) and .81 for the whole QDR36.

The final version will also be tested on homosexual mothers in a pilot study later this year (2009). Therefore in the item 33, the term "sexual intercourse" has recently been changed to "sex" to suit the homosexual women better. This could be regarded as an improvement of QDR36 for all study groups, as sex is more extensive than sexual intercourse and also because the other nearby items contain the word "sex".

QDR36 is based on the factor solution emerging from new first-time parents. This indicates that the factor structure may vary somewhat in different populations. However, the alpha coefficients show the reliability, and it is usually meaningful to describe and compare the QDR-indexes in different study groups.

## Implications

Regarding the usefulness of QDR 36 in for instance family/couple counselling, the intervening therapists assessed QDR as being very useful in counselling and also as having the potential of serving as a base for conversations with the couples. It was useful in that many couples had problems in one or several areas described in the questionnaire, so that the questionnaire could be used as a point of departure to broach certain topics and give focus to counselling.

# Conclusion

To conclude, hopefully this development of QDR36 from the original DAS, through a modified DAS-version and QDR35, has resulted in a useful and comprehensive measurement of marital quality for any kind of dyadic relationships in different periods and situations of life. QDR36 could be used in research on various study groups, to evaluate interventions as well as a base for a conversation with a client or a couple about the relationship, where areas of low scores then can be emphasised.

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# APPENDIX

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list:

		Always agree	Almost always agree	Occa- sionally disagree	Frequently disagree	Almost always disagree	Always disagree
1.	Handling family finances	6	5	4	3	2	<u>1</u>
2.	Company with friends	6	5	4	3	2	1
3.	Appropriate behavior in other persons' company	6	5	4	3	2	<u>1</u>
4.	Values and religious matters	<u>6</u>	5	4	3	2	1
5.	Ways of dealing with parents,						
	in-laws and other relatives	6	5	4	3	2	<u>1</u>
6.	Aims, goals, and things believed important	6	5	4	3	2	1
7.	Amount of time spent together	6	5	4	3	2	1
8.	Making major decisions	6	5	4	3	2	1
9.	Household tasks	6	□5	4	3	2	1
10	Leisure time activities and recreation	6	5	4	3	2	1
11	Decisions about career and personal development	6	5	4	3	2	1
			1				

	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
2. Have a stimulating exchange of ideas	1	2	3	4	5	6
3. Laugh together	1	2	3	4	□5	6
<ol> <li>Calmly discuss something</li> </ol>	1	2	3	4	5	6
5. Work together on a project	<u></u> 1	2	3	4	5	6
	(Mark x in relevant square)					
	Never	Almost never	Occa- sionally	Often	Almost always	Alway
<ol> <li>How often have you discussed or considered divorce/ separation?</li> </ol>	6	□5	4	3	2	1
<ol> <li>In general, how often do you think that things between you and your partner are going well?</li> </ol>	_	2	3	4	□5	6
8. Do you confide in your partner?	1	2	3	4	5	6
<ol> <li>How often do you think your partner takes his/her responsibility?</li> </ol>		2	3	4	5	6
0. How often do you and your partner quarrel?	6	□5	<b>4</b>	3	2	<u>1</u>
1. How often do you and your mate get on each other's nerves?	6	5	4	3	2	<u></u> 1

	(Mark x in relevant square)					
	Never	Almost never	Occa- sionally	Often	Almost always	Always
22. How often do you listen to the expressed wishes of your partner?	⊔ □1	2	3	4	5	6
23. How often do you misunderstand each other?	6	5	4	3	2	
24. How often is it a problem in your relationship that you or your partner do <u>not</u> show love and						
appreciation?	6	5	4	3	2	1
25. How often do you exper	rience that you	r partner could	give you supp	ort and comfor	t if needed?	
	<u>1</u>	2	3	<b>4</b>	5	6
	(Mark x in relevant square)					
	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
26. How often do you hug your partner now?	<u>1</u>	2	3	4	□5	6
27. How often do you kiss your partner?	1	2	3	4	5	6
28. How often do you wish to hug and cuddle your partner?	1	2	3	<b>4</b>	<u>5</u>	6
		3				

	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
29. How often the last 4 weeks have you and your partner been hugging and cuddling?	1	2	3	<b>4</b>	5	6
30. How often does this	Never	Almost never	Occa- sionally	Often	Almost always	Always
(question 29) approve to your wishes?	1	2	3	<b>4</b>	5	6
	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
31. How often do you feel sexual desire?		2	3	4	5	6
32. How often is it a problem that one of you is too tired for sex?	m □6	5	4	3	2	1
33. How often during the last 4 weeks have you had sex?	<u>1</u>	2	3	4	5	6
34. How often does this	Never	Almost never	Occa- sionally	Often	Almost always	Always
(question 33) approve to your wishes?	<u>1</u>	2	3	<b>4</b>	5	6
35. How often do you think your partner pays attention your sexual needs?						
-	1	2	3	4	5	6
		4				

36. Which of the following statements be	est describes how you feel abo	ut the future of your relationship?			
$\Box 6$ I want desperately for my relations	hip to succeed, and would go t	to almost any length to see that it does.			
$\Box 5$ I want very much for my relationsh	ip to succeed, and will do all	I can to see that it does.			
4 I want very much for my relationship	ip to succeed, and will do my	fair share to see that it does.			
☐3 It would be nice if my relationship relationship going.	succeeded, but I can't do muc	h more than I am doing now to keep the			
2 It would be nice if it succeeded, but going.	I refuse to do any more than I	am doing now to keep the relationship			
1 My relationship can never succeed,	and there is no more that I car	n do to keep the relationship going.			
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Quality of Dyadic Relationship (QDR) consists of the following dimensions					
Dyadic Consensus -"- Cohesion	(item 1-11)	- 11 item			
Conesion	(item 12-15)	- 4 item			

Dyad	ic Consensus	(item 1-11)	- 11 item
_''-	Cohesion	(item 12-15)	<ul> <li>4 item</li> </ul>
-"-	Satisfaction	(item 16-25, 36)	-11 item
_''-	Sensuality	(item 26-30)	- 5 item
-"-	Sexuality	(item 31-35)	- 5 item
			36 item

#### Use of QDR36:

Determine and show both Median and Mean, as the data might not be normally distributed. Compute the sum of values in each subscale and divide them with the number of items in that scale, which gives a possible range of 1-6 in each subscale. This will give more appropriate weights to all included subscales having differing numbers of items. The means of the subscales are then summed, which gives an index of marital quality ranging between 5 and 30.

When calculating differences of values between two occasions of measurement and/or between two independent samples, the non parametric tests Wilcoxon signed Rank test and/or Mann Whitney U-test should be preferred as most correct. This as the data is on ordinal level and the categorical variables lack equal distance between the response alternatives.

Validate QDR and its subscales with factor analysis and/or Cronbach's alpha in the present study group. Please, contact the corresponding author, Tone Ahlborg, when QDR36 is used, to spread the knowledge about its validity on different study groups. This makes it possible to develop QDR, and compare marital quality between different study groups. The instrument QDR36 is also available, electronically and in a Swedish version, to download from the home page <u>www.toneahlborg.se</u>.

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