# Relationship Quality in Hungary – Possible Trajectories and Determinants Extended Abstract / Planned Paper

Families and Households

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### Abstract

In this paper, I examine the relationship quality trajectories of Hungarian women and men between 2001 and 2012. I argue that instead of a single-trajectory approach suggested by many theoretical models, focus should be on the identification of the multiple possible relationship quality trajectories. The aim of the paper is to identify these distinct trajectories, and to examine which risk factors are associated with them, using the Hungarian Gender and Generations panel data.

With group-based trajectory analysis, four separate trajectory groups were identified in the women's sample, while three were found in the men's sample. These trajectory groups varied by initial levels of relationship quality, and by increasing, decreasing or stable trends.

Regarding risk factors, focus was on time-fixed socio-economic and relationship-specific variables. While relationship-specific variables, especially conflict resolution were found to be the most influential for both women and men, socio-economic risk factors were only associated with lower levels of relationship quality for women.

### Introduction

For social scientists, relationships were always a topic interest, ranging from the close study of male-female relations to their macro level effect on demographical trends. This natural curiosity towards relationships created a wide array of theoretical and methodological approaches to the study of relationship quality.

Albeit the subject of quality is not new, there is relatively few empirical findings based on longitudinal panel data. In this paper, the aim is to examine the self-reported relationship quality trajectories of Hungarian women and men continuously in a relationship between 2001 and 2012, and to identify risk factors associated with these trajectories. Along with several other researchers of this field before, I suggest that the singular approach to relationship quality has to be left behind in favour of a multi-trajectory viewpoint, which emphasizes the heterogeneity of individual relationship quality trajectories.

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In the first part of this study, I discuss the theoretical considerations and empirical findings regarding the measurement of relationship quality, its changing nature and the factors influencing it. In the second part, I present preliminary empirical data using a group-based trajectory analysis approach, highlighting the multiple possible profiles of marital quality change. Finally, using a multivariate approach, I examine the effect of various risk factors on relationship quality.

### Measuring relationship quality

In the social sciences, many approaches have been developed which aim to make one aspect or the global meaning of relationship quality quantifiable. Most early studies were typically atheoretical (Hicks and Platt 1970) and lacked standardization (Ramu 1984), which resulted in multiple ways (and many problems) of measuring relationship quality. Generally, this makes difficult to compare empirical results, especially between different scientific fields of study.

The most often studied aspects are happiness, quality in general, satisfaction, interaction, communication, disagreements / conflict resolution and proneness to separation / divorce in a relationship (Corra et al. 2009, Johnson 1995, Orden and Bradbury 1968, Booth et al. 1984, Johnson et al. 1986). These concepts are centred around the negative and positive dimensions of relationship quality, which are not mutually exclusive (for example, one can have no arguments with his/her partner, while still being unsatisfied with the relationship).

Most surveys utilize one global scale for relationship quality, as these global measures offer a simple metric, and also facilitate easier comparability of results (Johnson 1995). However, while usable, many scholars note that they oversimplify the intricacies of a relationship (Spanier 1979). More complex measures are better at grasping both the positive and negative dimensions, but are employed in relatively few representative surveys, and rarely available in longitudinal panel databases.

Apart from the difficulties of measurement, certain selection and bias effects have to be considered. Short term, unstable, low-quality relationships are often excluded from studies, especially from those which utilize longitudinal data (Lupri and Friedes 1981, Orden and Bradburn 1968), mainly due to panel attrition. This selection effect often causes a heavily skewed distribution of the selected measurement. Also, Hicks and Platt (Hicks and Platt 1970) notes that most often young, white, middle class protestant respondents are present in surveys, thereby the generalizability of some results can be disputed.

Regarding bias effects, some theoreticians argue that the topic of relationship quality can cause a conventionalization effect (e.g. Edmonds 1967), which is the tendency of an individual to present their relationship in a better light, due to certain societal norms and expectations.

However, studies showed (Johnson 1995, Fowers and Pomerantz) that this tendency correlates with relationship quality, as people in good relationships tend to present their partnership in an even more positive light.

In short, while there is a wide range of tools and approaches available for measuring relationship quality, due to the formulation of questions, bias and selection effects, results should be interpreted in light of these processes. Recent findings suggest that self-administered, anonymous online survey methods decrease bias effects (Rohr 2018).

# Changes in time

Multiple theoretical models and approaches emphasize the importance of time. In crosssectional studies, this means the comparison of relationships in different stages, while with longitudinal panel studies, it became a possibility to follow them through several years.

Relationship quality changes with time, but there are different views on the expected trajectories. According to the "gradual disillusionment" model, a relationship starts with high quality which gradually decreases (Houston et al. 2001, Waller 1938), as the couple loses the idealization aspect of early relationships. A similar trajectory is hypothesized by the "honeymoon-is-over" effect (Aron et al. 2002, Kurder 1998), as some scholars note that the high expectations towards the relationship at the early years turn into frustration and demands, which decrease marital quality (Huston and Houts 1998).

Similarly to the "gradual disillusionment" model, the "emergent distress" model (Bradbury, Cohan and Karney 1998) presumes high levels of marital quality early on, but partners expect a degree of decline in levels of love and affection in time. In this model, the rising conflicts and negativity corrode the relationship, as the way of handling differences and difficulties becomes the defining factor.

However, some theoreticians propose a stable relationship quality trajectory. According to the "enduring dynamics" model (Huston et al. 2001), also called "maintenance hypothesis" (Karney and Bradbury 1997) and "perpetual problems" model (Huston 1994, Huston and Houts 1998), couples enter a relationship with consistent individual differences, which they are aware of and choose partners accordingly. This preparedness leads to a stable marital quality trajectory, as people move towards serious relationships with those who they can get along with (Huston 1994).

Empirical research on the possible trajectories are highly inconsistent. Cross-sectional studies often emphasize a U-shaped curve, with high quality early years and similarly happy retirement years (Glenn 1995, Ross et al. 1990, Spanier and Lewis 1980). A linear decline was found in many studies (e.g. Huber and Spitze 1980, Karney and Bradbury 1995, Kurdek 1998, Lindahl

et al. 1998), while others note specific points after the risk of relationship disruption and/or low relationship quality increases (e. g. Kurdek 1999, Greenstein 1995).

With the examination the presented theoretical and empirical works, it is reasonable to hypothesize the existence of several distinct relationship trajectory groups, as opposed to a single trend. Agreeing with Birditt et al. (2012), more attention should be drawn to the researchers who argue against the universality of the relationship quality trajectories (e.g. Kamp Dush et al. 2008, Lavner and Bradbury 2010, Birditt et al. 2012).

Kamp Dush et al. (2008) found three distinct marital happiness groups, with a slightly U-shaped curves across 20 years. 38% of their respondents were in a stable, high marital happiness trajectory, while 41% were in a stable, middle category. Only 21% of the respondents were in a low marital happiness group. Lavner and Bradbury (2010) studied marital satisfaction in the newlywed years. Five distinct different trajectories were found both husbands and wives, showing stable, declining, and varying trajectories. Rapid and increasing decline were confined to relatively small subgroups of spouses, while other trajectories showed relative stability, albeit at different satisfaction levels.

Birditt et al. (2012) found that couples fit into qualitatively different trajectory groups varying by initial happiness levels – confirming both the enduring dynamics and the gradual disillusionment models. The lowest group showed initially low levels with large declines, the moderate group showed slight drops, while the highest group showed stable levels over 16 years. Also, wives had a greater variation in their happiness groups, while husbands fit into a smaller amount of groups.

# **Possible determinants**

While there is an interesting theoretical and empirical debate about the changes in relationship quality in time, attention should also be kept at the numerous factors affecting partnership quality.

According to empirical studies, women are more likely to be unhappy with their relationships, mention more causes for divorce, and think about divorce/separation more frequently (Rogers and Amato 2000, Levinger 1965, Cleek and Pearson 1985, Huber and Spitze 1980), which can be linked to gender specific differences in a relationship (Bernard 1972).

Regarding the effects of age, some scholar argue that younger people have different interaction patterns, which negatively affect their relationships (Amato et al. 2003, Amato and Hohmann-Mariott 2007). Entering a relationship at younger ages tend to go hand-in-hand with lower relationship quality, explained by the shorter amount of time available to find and get to know the ideal partner (Földházi 2008).

The effect of socio-economic status inside a relationship is a long disputed factor, with many theoretical arguments. One of the most common starting point is Becker's specialization model (Becker 1973, 1974, 1981). Becker argues that a relationship is held together by interdependence, which is formed by gender specific roles in a relationship. From the viewpoint of this theory, men perform better in work and income related roles, while women are better in household specific tasks. These two advantages complement each other, thus by sharing these resources, both men and women achieve a higher status than as a single person. Becker states that instability occurs when the interdependence is low, mainly caused by the full-time employment of women. This argument is similar to the "independence hypothesis", which states that the improving socio-economic position of women decrease marital quality, and allows for women to leave unsatisfactory relationships (Lee and Ono 2008, Oppenheimer 1997). Also, some feminist scholars note that the improving status of women (mainly employment) facilitates freedom of choice, as opposed to an oppressive need to be in a relationship to survive (South 2001, Coontz 2004, Greenstein 1995, Heckert et al. 1998).

Socio-economic status should be viewed relatively between the respondent and his or her partner – relative educational attainment is often used to signify this. The effect of education can be beneficial, as higher educated couples are more stable (Vannoy and Philliber 1992), or detrimental, especially regarding women (South 2001). However, some scholars had found no connection (Huber and Spitze 1980, Corra et al. 2009).

Relationship specific determinants of relationship quality include relationship type, children, the duration of the relationship, frequency of conflicts and conflict management. Some theorize that relationship type can be influential, because cohabitations are inherently different from marriages (Heimdal and Houseknecht 2003, van der Lippe et al. 2014, Brown 2015).

Children are often regarded as a stabilizing factor in a relationship, preventing separation/divorce (Cherlin 1977). According to the "braking hypothesis", the number of children is important, as the first child greatly reduces the risk of divorce (Waite et al. 1985, White and Booth 1985). Some scholars note that children disrupt the couple's division of labour, intimacy and free time, resulting in lower relationship quality (e.g. Dalgas-Pedish 1993). Conflicts are a part of living with someone, however their management can be a significant factor in marital quality and divorce/separation risks. Communication skills and the quality of interactions are often linked to a happier and more stable partnership (e.g. Booth et al. 1985, Hill 1988).

Lastly, religion is considered to be a strong stabilizing factor and a positive influence on relationship quality, as most religions forbid or severely limit the options to leave a relationship, especially a marriage (Ortega et al. 1988, Schoen et al. 2002).

In summary, many factors (be it time-fixed or time-varying) affect a relationship, which in itself is an argument for a less generalizing methodical approach. Based on the presented theoretical considerations and empirical results, two main hypotheses can be formed for the research:

- 1. Multiple, different trajectories of relationship quality exist, instead of a singular, all-encompassing trajectory.
- 2. Individuals belong to different trajectory groups based on socio-economic and relationship specific risk factors.
  - a. Low socio-economic status is linked with lower levels of relationship quality.
  - b. Ineffective conflict resolution is associated with low levels of relationship quality.

# Data

The data used in this study comes from four waves of the Hungarian Generations and Gender Survey, conducted between 2001 and 2012 on a nationally representative sample. From the original 16363 respondents, 8103 gave answers in all available waves. Panel attrition was mainly due to nonresponse, disappearance of respondent, unavailability, and mortality (Makay 2016). Women, people with higher levels of education, those with children and living in smaller cities were less likely to drop out (Makay 2016).

From the remaining sample, 1891 women and 1505 men were selected who were in a heterosexual relationship at wave 1, continued to be in that same relationship at wave 4, and lived with their partner in the same household. All of the selected respondents gave answers to the question regarding their relationship quality, in all four waves. While this provides adequate information for the selected methods, several limitations have to be considered.

First, responses are from individuals and not from both members of the couple, so the available data reflects individual experiences. Second, the three and four year intervals between waves do not permit a year-by-year analysis of relationship quality, so potential short term changes and trends cannot be assessed – which, especially in the case of new relationships, would be more adequate. Third, there is a large variety of relationship duration at the beginning of the first wave. With the exception to those who married in 2001/2002, we do not know where these relationships started in regards to the selected marital quality indicator.

# Analytical methods

For the identification of distinct relationships quality trajectories, group-based trajectory analysis (GBTA) was used. The GBTA is a semiparametric modelling strategy which uses

multinomial modelling to discover relatively homogeneous clusters of developmental trajectories (Nagin 2005, 1999). The GBTA is an application of finite mixture modelling, with an underlying likelihood function that is easy to adapt to binary, scale / continuous and count data too. As in growth curve modelling, the trajectory shapes are described by a polynomial function of time (Nagin 2005).

While traditional growth curve modelling assumes that the parameters that define the polynomial describe a population mean, and individuals vary continuously around this mean (commonly according to a multivariate normal distribution), the group based approach assumes that individual differences in trajectories can be described by a finite set of different polynomial functions of time (Nagin 2005). Thus the heterogeneity of the data can be summarized by multiple trajectory groups, with a different set of parameters for each group (Nagin 2005).

Using this method, the number of distinct trajectories in the data must be specified for extraction (Louvet 2009). To infer the correct group number, the Bayesian Information Criterion (BIC) is used, with generally the highest value being the best fit amongst a number of models (Nagin 2005). For the current study, a two-stage model selection process was used, as recommended by Nagin (2005). The first-stage involves finding the number of groups that maximize the BIC score, while in the second stage focuses on specifying the shape of individual groups (either linear, quadratic or cubic).

Comparing two models with the BIC score is usually done by the approximation of the Bayes factor (Schwartz 1978, Kass and Wasserman 1995) for two models, and a related metric for more than two models, which approximates the probability that the model with a set amount of groups is the correct one from a pool of considered models.

As the model with a specified number and form of trajectory is fitted, individuals are assigned a posterior group membership probability, which measure the probability that an individual belongs to a specific trajectory group (Nagin 2005). This is different from the probability of group membership, which measures the proportion of the population that belong to the distinct groups. On the basis of the posterior probabilities, individuals are assigned to the different groups, which can be used to create profiles of group membership (Nagin 2005).

Also, posterior probabilities are used to judge model adequacy. Nagin presents several diagnostics for this purpose: the average posterior probability of assignments for each group (AvePP), the odds of correct classification (OCC), and the estimated versus assigned group sizes. As a rule-of-thumb, Nagin states that the AvePP should be at least 0.7 for all groups, as lower values indicate uncertain group assignments. OCC is a measure of the classification accuracy, as it evaluates the posterior probability assignments against classification based on

random assignment based on the estimated population base rate (Nagin 2005). Larger values of OCC indicate accurate assignments, and Nagin suggests that a value greater than 5.0 for all groups is a sign of the model's high assignment accuracy. Finally, a simple way to evaluate model adequacy is to compare the group's estimated size versus the proportion of the sample assigned to the groups by the posterior probabilities. Large differences indicate lower model accuracy (Nagin 2005).

As classifications are probabilistic, conventional statistical methods for testing group differences and the effects of variables are not perfectly adequate, as they do not take classification error into account (Nagin 2005). The solution is to test whether potential predictors affect probability of group membership, with a logit function in case of two-group models, and with a multinomial logit model for more than two groups (Nagin 2005) – as usual, one group is chosen as a reference or contrast group.

### Measures

*Marital Quality*. In all four waves, participants were asked to indicate how satisfied they are with their current relationship on a 0 to 10 scale, with 0 meaning "not at all satisfied" and 10 as "fully satisfied". Participants had the option of refraining from an answer, although none of the women in the sample did so.

*Time*. Most trajectory related works use either age or relationship duration as time variable. However, because of the heterogeneity in both metrics, time is defined as time elapsed since the first wave, which is a suitable alternative in GBTA analysis (Nagin 2005).

Level of education and relative educational status. In the Hungarian database, education was measured with a five category variable, ranging from less than elementary to tertiary and higher. For the purposes of the analysis, the two lowest levels were collapsed into one category. Relative educational status was computed using these variables for the respondent and her partner. It should be noted that many studies (especially with a multinational sample) use simpler categorization (typically named low, medium and high), which in turn affect the ratio of homogamous versus non-homogamous couples.

*Conflict resolution.* Conflict resolution was measured in Wave 1 with five category variable. Participants were asked to indicate what characterises their behaviour the most when they have an argument. Possible answers were "keeping my opinion to myself", "calm discussion", "one member of the couple sulks in silence", "argument and shouting" and finally, "coming to blows with each other". These categories were collapsed into a dichotomous variable, which indicate whether there is a calm discussion or not.

Subjective financial situation of the household. Participants were asked about their personal and household income in all waves. However, for the partner's income, there is a sizeable amount of missing data, which renders analysis with these variables less than ideal. Substituting for the actual income data, the respondent's subjective evaluation of their income is used. Respondents could indicate whether they live without problems, live acceptably, can barely make ends meet or have frequent financial issues. For the modelling procedure, these categories were also collapsed into a dichotomous variable, indicating the presence of at least monthly financial problems in the household.

*Religiosity.* Participants were asked to characterise themselves regarding their level of religiosity. As multiple categories were available ("religious on my own way", "can't say whether I am" "I am not religious"), a dichotomous categorization were employed again, measuring whether respondents follow their church's teachings or not.

*Other dependent variables.* In the model, age, partner's age, age the start of the relationship, divorce history, length of the relationship, employment, number of children and a cohort variable were also employed to control and to examine their possible effects.

#### Findings

Quality TrajectoriesTrajectory GroupPropInterceptLinearQuadraticCubicAvePPOCCProbRelationship Quality Trajectory Parameter EstimatesWomen (n = 1891)Low - decreasing0,095,81****-0,08****0,8987,20,08****Average - stable0,568,91****-0,3****0,09****-0,006****0,928,580,57****High - decreasing0.071524****-052****00.7119.70.10****												
Trajectory Group	Prop	Intercept	Linear	Quadratic	Cubic	AvePP	OCC	Prob				
		Relationship	Quality Traje	ctory Parame	eter Estimates							
Women (n = 1891)												
Low - decreasing	0,09	5,81****	-0,08***	-	-	0,89	87,2	0,08****				
Average - stable	0,56	8,91****	-0,3****	0,09****	-0,006****	0,92	8,58	0,57****				
High - decreasing	0,07	15,24****	-0,52****	-	-	0,71	19,7	0,10****				
High - increasing	0,28	11,05****	0,29****	-	-	0,76	10,1	0,24****				
BIC for final model				-119	27							
Men (n = 1505)												
Low - decreasing	0,05	7,54****	-0,17****	-	-	0,78	61,8	0,06***				
Average - stable	0,51	9,16****	-0,25**	0,08***	-0,01***	0,87	6,08	0,52****				
High - stable	0,44	12,1****	-0,75***	0,25****	-0,02****	0,86	7,96	0,43****				
BIC for final model				-824	46							

 Table 1: Estimated Percentages, Parameter Estimates, and Model Fit for Women's and Men's

 Quality Trajectories

Note: Prop = the actual proportion of individuals who fall into each group; AvePP = the average posterior probability, which is the probability an individual belongs to a trajectory group; OCC = the odds of correct classification; Prob = the probability of group assignment or the estimated percentages; BIC = Bayesian information criterion. \* p < 0.05; \*\* p < 0.01; \*\*\*\* p < 0.001; \*\*\*\* p < 0.001

#### Women

For women's marital quality, an initial, one trajectory group fit (BIC = -12767.14) suggested a cubic shape, but the final model (BIC = -11927) with three linear and one cubic trajectory proved to be the best fit. Figure 1 shows the trajectories, with the group-mean points.

The "low-decreasing" group is estimated to be 8.5% of the female sample. Women belonging to this trajectory reported relatively low relationship quality on average in 2001, which continued to decline linearly in the observed period. The second trajectory is the "average-stable" group, which is estimated to be more than half of the female sample, 57.3%. In this group women consistently reported their relationship between the scores of 8 and 9 on average, without any noticeable increase or decrease. The third group is of the "high-decreasing" trajectory, estimated to be around a tenth of the female sample (10.4%). This trajectory group is characterized by very high initial relationship quality, with a noticeable decline during the four waves. Finally, nearly a quarter of the respondents were estimated to belong to the "high-increasing" group (23.8%). This trajectory group also showed high levels of relationship quality, but with an increasing trend, almost reaching the maximum of the scale.



Figure 1: Relationship Quality Trajectory Groups of Women (2001 - 2012)

### Men

Looking at men, the starting one-group model suggested a cubic shape (BIC = -8606). The best fitting model was found to be containing three trajectory groups (BIC = -8246), with one linear and two cubic trajectories (Figure 2).

The first, "low-decreasing" group was characterized by a lower than average starting point, and a fairly rapid linear decline until 2012. While this group is similar to the one found in the women's sample, the decline was found to be more pronounced and a lesser portion of the men were estimated to belong to it (5.5%). The "average-stable" group (52%) was also similar to the women's group under the same name, with a slightly higher (between 9 and 8.5, compared to 8.5 and 8) but similarly stable relationship quality trajectory. The final group, called "high-stable" was the second largest and unique to men (42.6%). Relationship quality generally remained stable and very high in this group, moving between 9.5 and 10.



Figure 1: Relationship Quality Trajectory Groups of Men (2001 - 2012)

In conclusion, the GBTA analysis confirmed the first hypothesis, showing multiple trajectory groups. Comparing women and men, it can be noted that relationship quality trajectories were more diverse amongst women with two decreasing, one stable and one increasing group, while the majority of men reported average and high, but stable relationship quality throughout the years. While more women were estimated to belong to the lowest relationship quality group, in a similar group, men's levels of quality declined more rapidly.

# **Risk factors**

As mentioned earlier, proper statistical testing on the probability of group membership should be done with the classification error taken into account. For this reason, a multinomial logit model was constructed to measure the time fixed effect of certain characteristics on group membership probability versus a reference group (Nagin 2005). Table 2 and 3 shows the results of the multinomial logit models. For both genders, the reference group was chosen to be the "average-stable" as this was the largest group in both cases with also a relatively stable trajectory over time.

#### Women

Relative to the "average-stable" group, there were significant factors that increased the probability of having a "low-decreasing" marital quality trajectory. Most notably, if the respondent indicated that a calm conflict resolution is the most common in her relationship, she was nearly 75% percent less likely to be in this group than in the "average-stable". Women with at least monthly financial problems, and with only one member employed in the relationship were 2-2.5 times more likely to follow a "low-decreasing" trajectory in the observation period. Based on these results, it seems that financial and occupational problems coupled with ineffective conflict resolution are associated with the probability of a low and deteriorating relationship quality trajectory as opposed to a stable, higher quality one.

There were relatively few statistically significant differentiating variables between a "highdecreasing" trajectory and the reference group. Women who were married were 3.9 times more likely to belong to this group than to the "average-stable" one. As with the previous comparison, conflict resolution plays an important part, as women who reported calm conflict resolution were more probable (3.91 times) to belong to this trajectory group. An interesting result regarding this group is the statistical significance of relationship duration. With each year spent in a relationship, women were 6% less likely to belong to this trajectory. This can be interpreted as a tendency for younger couples to follow a "high-decreasing" marital quality trajectory, corresponding with a "honeymoon-is-over" phase.

Regarding the probability of belonging to a "high-increasing" trajectory, the respondents age was statistically significant, as being a year older was associated with a 4% increased probability of belonging to this trajectory group, compared to the reference one. Also, as is common in the higher initial relationship quality groups, calm conflict resolution greatly increased the probability of following a "high-increasing" trajectory. Women who had higher level of education than their partners were 82% more likely to belong to this group than the "average-stable", while those who had lower relative status were 2.33 times more likely to be in a "high-increasing" trajectory group. This suggests that heterogamous relationships mainly belong to this group than the "average-stable" one. The age at the start of the relationship variable and the cohort effect were only significant in this group. Those women who began their relationship one standard deviation lower (under the age of 18) than the mean age at the beginning of relationships were 2.62 times more likely to be in this "high-increasing" group.

The results for the cohort effect suggest that women born in 1965 or later had a higher probability to belong to this increasingly satisfied group. The results indicate that the "high-increasing" group is consisting of early formed, well-functioning heterogamous relationships, without a child in the household.

# Men

Compared to the male "average-stable" group, the only significant factor which increased the probability of belonging to the "low-decreasing" group was conflict resolution. Those respondents who reported a calm manner of conflict management were 59% less likely to belong to this group, suggesting that men in relationships characterized by conflicted tend to be unsatisfied with their partnership.

Opposed to this, a higher probability of being in the "high-stable" group was associated with relationship duration, and good conflict management. Men in longer relationships tended to be more satisfied, with each year increasing the probability of membership by 5%. Those in relationships with calm conflict resolution methods were 2.32 times more likely to be in the "high-stable" group.

In summary, trajectory group membership are influenced by socio-economic and relationshipspecific risk factors. In the case of women, socio-economic factors were mostly linked with the "low-decreasing" trajectory group, while conflict resolution played a major part in all group membership probabilities. Therefore, hypotheses 2a and 2b can be confirmed for women. Looking at men, results differ. While conflict resolution was a highly significant risk factor (confirming hypothesis 2b), none of the socio-economic risk factors were of any significant, therefore, hypothesis 2a is rejected for men. This could indicate that men's evaluation of the relationship is not as dependent on socio-economic conditions as women's.

# Conclusions

In this paper, I examined the development of relationship quality using a representative sample of Hungarian women and men. The goal was to identify the distinct relationship quality groups, and to examine the effect of certain time-fixed risks on trajectory membership probability.

Seven trajectory groups (four for women, three for men) were identified, with varying initial quality and stable, increasing or decreasing trends. Confirming Birditt et al.'s results (2012), a separate group was linearly decreasing with a low initial point for women and men too. The results of the GBTA suggest that a one-group approach is inadequate for modelling the change of relationship quality in time. Additionally, the "average-stable" and "high-increasing" groups provided evidence for the enduring dynamics model, while the "low-decreasing" and "high-decreasing" ones for women confirmed the models suggesting gradual decline in relationship

quality. Confirming Lavner and Bradbury's (2010) results, the low relationship quality group was confined to a relatively small subset of both samples. During the examination of the possible factors affecting relationship quality, inefficient conflict resolution and bad financial status were linked with low levels of relationship quality in the case of women. For men, only dysfunctional conflict resolution was a significant risk of low relationship quality trajectory.

In summary, the development of relationship quality is a heterogeneous phenomenon, which requires an approach such as GBTA to capture in suitable complexity. While the multiplicity of the trajectories is scientifically interesting in itself, inference regarding the potentially influential factors can further shed light on this complex process. Future analysis should focus on not just time-fixed risks, but also on time-varying effects such as childbearing, changing financial status and employment, and long-term illnesses.

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# Appendix

	Low - decreasing					High - decreasing					High - increasing				
Variable	В	exp(B)	Std. Error	т	Sig.	В	exp(B)	Std. Error	Т	Sig.	В	exp(B)	Std. Error	Т	Sig.
Constant	-3,0302	0,0483	1,0263	-2,9530	0,0032	-4,3495	0,0129	1,5108	-2,8790	0,0040	-4,5097	0,0110	0,7548	-5,9740	0,0000
Age	0,0397	1,0405	0,0284	1,3980	0,1621	0,0241	1,0244	0,0351	0,6880	0,4913	0,0440	1,0449	0,0191	2,3020	0,0214
Partner older by 4-9 years	0,3753	1,4554	0,2179	1,7220	0 <i>,</i> 0850	0,3304	1,3915	0,2890	1,1430	0,2530	-0,2492	0,7794	0,1643	-1,5170	0,1294
Partner older by 10- years	0,1757	1,1921	0,4274	0,4110	0,6811	0,2922	1,3393	0,5530	0,5280	0,5973	-0,1452	0,8648	0,3390	-0,4280	0,6684
Resp. older by 4- years	-0,3731	0,6886	0,5320	-0,7010	0,4831	0,1539	1,1664	0,6394	0,2410	0,8098	0,2197	1,2457	0,4076	0,5390	0,5898
Married	-0,1379	0,8712	0,4035	-0,3420	0,7325	1,3679	3,9269	0,6123	2,2340	0,0255	0,3125	1,3668	0,3378	0,9330	0,3507
Prev. divorce	0,3496	1,4184	0,3810	0,9180	0,3589	0,2899	1,3363	0,4849	0,5980	0,5500	0,0668	1,0691	0,2983	0,2240	0,8228
Relationship duration	-0,0148	0,9853	0,0245	-0,6060	0,5449	-0,0594	0,9423	0,0289	-2,0530	0,0401	-0,0075	0,9926	0,0172	-1,0432	0,6655
Calm conflict resolution	-1,3523	0,2586	0,2412	-5,6070	0,0000	1,3636	3,9104	0,3986	3,4210	0,0006	1,0559	2,8747	0,1600	6,5980	0,0000
Financial problems	0,7700	2,1598	0,2511	3,0670	0,0022	-0,9421	0,3898	0,7451	-1,2640	0,2062	0,1435	1,1543	0,2208	0,6500	0,5157
Resp. Unemployed	0,7106	2,0351	0,2663	2,6690	0,0076	0,3880	1,4740	0,3607	1,0760	0,2821	0,1524	1,1646	0,2351	0,6480	0,5168
Partner Unemployed	0,4152	1,5147	0,3304	1,2570	0,2089	-0,3615	0,6966	0,6197	-0,5830	0,5597	-0,1913	0,8259	0,3254	-0,5880	0,5563
Resp. Edu. Is higher	-0,2331	0,7921	0,2482	-0,9390	0,3476	-0,2007	0,8181	0,3120	-0,6250	0,5318	0,5998	1,8217	0,2050	2,9260	0,0034
Resp. Edu. Is lower	0,1814	1,1989	0,2782	0,6520	0,5144	0,4253	1,5300	0,3444	2,2350	0,2170	0,8497	2,3389	0,2274	3,7370	0,0002
Religious	-0,5088	0,6012	0,3128	-1,6270	0,1038	0,2768	1,3189	0,3647	0,7590	0,4479	0,2239	1,2509	0,1838	1,2180	0,2233
Childless	0,2537	1,2888	0,2550	0,9950	0,3199	0,5694	1,7671	0,3088	1,8430	0,0653	0,5138	1,6716	0,1819	2,8240	0,0048
Under 18 at the start of the rshp.	0,2171	1,2425	0,4226	0,5140	0,6074	-1,0349	0,3553	2,1023	-0,4920	0,6226	0,9642	2,6228	0,2748	3,5080	0,0005
Cohort effect (1965-)	-0,0892	0,9146	0,3878	-0,2300	0,8179	0,2997	1,3494	0,5300	0,5650	0,5718	0,6184	1,8560	0,2800	2,2090	0,0272
BIC								-11860,93							

### Table 2: Risk factors on group membership probability - Women (ref.: A-S)

Variable			ow - decreasin		High-Stable							
	В	exp(B)	Std. Error	Т	Sig.	В	exp(B)	Std. Error	Т	Sig.		
Constant	-3,4290	0,0324	1,7599	-1,9480	0,0514	-2,5395	0,0789	0,7232	-3,5120	0,0004		
Age	0,0170	1,0172	0,0475	0,3580	0,7202	0,0039	1,0039	0,0188	0,2060	0,8369		
Respondent older by 4-9 years	0,4130	1,5114	0,6905	0,5980	0,5497	-0,4483	0,6387	0,3954	-1,1340	0,2570		
Respondent older by 10- years	-0,2983	0,7420	0,4091	-0,7290	0,4659	0,0346	1,0352	0,1611	0,2150	0,8301		
Partner older by 4- years	0,0220	1,0222	0,8669	0,0250	0,9798	-0,2447	0,7830	0,3917	-0,6250	0,5322		
Married	-0,2661	0,7664	0,7306	-0,3640	0,7157	0,3679	1,4447	0,3465	1,0620	0,2885		
Prev. divorce	0,7447	2,1059	0,6950	1,0720	0,2839	0,5562	1,7439	0,3126	1,7790	0,0753		
Relationship duration	0,0382	1,0390	0,0532	0,7180	0,4729	0,0495	1,0508	0,0168	2,9470	0,0032		
Calm conflict resolution	-0,8903	0,4105	0,4092	-2,1760	0,0296	0,8418	2,3206	0,1544	5,4520	0,0000		
Financial problems	-0,1242	0,8832	0,4831	-0,2570	0,7971	-0,2552	0,7747	0,2409	-1,0600	0,2893		
Resp. Unemployed	0,6504	1,9162	0,5060	1,2850	0,1988	0,0960	1,1007	0,2432	0,3950	0,6931		
Partner Unemployed	0,1575	1,1706	0,5556	0,2830	0,7768	-0,0582	0,9435	0,2663	-0,2190	0,8270		
Resp. Edu. Is higher	-0,1107	0,8952	0,4296	-0,2580	0,7967	-0,0013	0,9987	0,1772	-0,0070	0,9942		
Resp. Edu. Is lower	0,2600	1,2969	0,5115	0,5080	0,6113	0,1627	1,1767	0,2140	0,7600	0,4471		
Religious	-0,0382	0,9625	0,6333	-0,0600	0,9519	0,3900	1,4770	0,2132	1,8300	0,0673		
Childless	-0,8013	0,4487	0,4708	-1,7020	0,0888	-0,0614	0,9405	0,1817	-0,3380	0,7355		
Under 18 at the start of the rshp.			-					-				
Cohort effect (1965-)	0,5148	1,6734	0,7119	0,7230	0,4696	0,8954	2,4483	0,2796	3,2030	0,0014		
BIC	-8221,04											

Table 3: Risk factors on group membership probability - Men (ref.: A-S)