



KOCHI UNIVERSITY OF TECHNOLOGY

Social Design Engineering Series

SDES-2021-7

Mis(match) and happiness in marital relationship: Importance of future planning and inquisitiveness

Khatun Mst Asma

School of Economics and Management, Kochi University of Technology

Yu Nakamura

Sansan, Inc, Japan

Koji Kotani

School of Economics and Management, Kochi University of Technology

15th July, 2021

School of Economics and Management

Research Institute for Future Design

Kochi University of Technology

KUT-SDE working papers are preliminary research documents published by the School of Economics and Management jointly with the Research Center for Social Design Engineering at Kochi University of Technology. To facilitate prompt distribution, they have not been formally reviewed and edited. They are circulated in order to stimulate discussion and critical comment and may be revised. The views and interpretations expressed in these papers are those of the author(s). It is expected that most working papers will be published in some other form.

Mis(match) and happiness in marital relationship: Importance of future planning and inquisitiveness

Khatun Mst Asma^{*,†} Yu Nakamura[‡] Koji Kotani^{*,§,¶,||,**}

July 15, 2021

Abstract

Having a sense of good match with the partner in a married couple shall be important to have a stable relationship and a happy life. However, little is known about the possible determinants for having such a relationship and happiness in marriage. We empirically examine (i) what induces a husband or wife to have a sense of good match, “my partner is in good match with me,” and (ii) how the husband’s and wife’s perceptions to the match or mismatch are related to his or her happiness. The questionnaire surveys were conducted in Japan and data are collected from 247 married couples. The statistical analyses reveal the following main findings. First, a husband’s inquisitiveness (intellectual curiosity and flexible cognitive ability) and a couple’s recognition to the amount of family future-planning discussion not only positively influence having a sense of good match but also contribute to individual happiness. Second, “both-match” couples who recognize “my partner is in good match with me” one another are much happier than couples who do not, and “both-mismatch” couples who recognize “my partner is NOT in good match with me” one another are the unhappiest among any other type of mismatch couples. Overall, sufficient future-planning discussion and a personal attribute of curiosity & acceptance to something new and/or different are identified to be the main drivers for couples to maintain a feeling of good chemistry, enhancing individual happiness directly and indirectly through a mediator of having the sense of mis(match).

Key Words: Mis(match); happiness; future planning; inquisitiveness; couples

*School of Economics and Management, Kochi University of Technology, Japan

†Department of Agricultural and Applied Statistics, Bangladesh Agricultural University, Bangladesh

‡Sansan, Inc, Japan

§Research Institute for Future Design, Kochi University of Technology, Japan

¶Urban Institute, Kyusyu University, Japan

||College of Business, Rikkyo University, Japan

**Corresponding author, E-mail: kojikotani757@gmail.com. We do not have any conflict of interest.

Contents

1	Introduction	2
2	Methods and Materials	5
3	Results	8
4	Discussion	14
5	Conclusion	16

1 Introduction

Having a sense of good match with the partner or counterpart in any relation between two agents is important to maintain a stable relationship for a happy life. In the societies, people want to find a suitable and/or stable partner in their life, such as a worker searching a good job, an organization looking an employee, a student searching a good university or a single person seeing a partner. However, the outcome of these relationships are affected if there exist a two-sided matching problem between two agents (Burdett and Coles, 1999). A good compatible relationship not only describes the present situation but also predicts the state of relationship in the near future (Berscheid, 1985). A growing number of literature in the field of sociology and psychology states the importance of long lasting committed relationships in the society, but there is a scarcity of researches that document how to maintain a sense of good match between two agents (Waite and Gallagher, 2001, O’Connell, 2008, Meunier and Baker, 2012). Therefore, it is crucial to recognize the sense of mis(match) with the partner for happiness and social welfare. The current study examines what induces a husband and wife to have a good match as well as how their perceptions of match or mismatch are related to individual happiness.

Several previous studies examine the relationship between marriage and subjective happiness (Stack and Eshleman, 1998, England, 2001, Tsou and Liu, 2001, Lucas et al., 2003, Frey and Stutzer, 2005, Lucas and Clark, 2006, Stutzer and Frey, 2006, Zimmermann and Easterlin, 2006, Lee and Ono, 2008, Kaufman and Taniguchi, 2010, Musick and Bumpass, 2012, Vanassche et al., 2013, Qari, 2014,

20 Tiefenbach and Kohlbacher, 2015, Wadsworth, 2016, Perelli-Harris et al., 2019, Chen, 2018, Yoo and
21 Lee, 2019). Chapman and Guven (2016) use census data in the United States, United Kingdom and
22 Germany for examining the relationship between marriage quality and happiness, finding that people
23 in self-assessed poor marriages seem to be worse and much less happier than unmarried people. Tao
24 (2019) examines the relationship between marriage and happiness in Taiwan, reporting that a good
25 quality match in marriage is important for happiness. Carr et al. (2014) use national representative
26 panel data in the United States and explore that marital satisfaction is correlated with life satisfac-
27 tion and momentary happiness. Kimbrough and Kuo (2010) mention that the two-sided aspect from
28 both partners is important to evaluate their relationship for stability, equity and social welfare. Svarer
29 (2005) documents that learning about a good quality match is crucial for reducing the risk of divorce.
30 Overall, it is important to examine the chemistry between two partners in a married couple and how
31 to maintain a sense of good match for happiness.

32 Past studies in the marital relationship mainly focus on marital satisfaction by applying the quan-
33 titative and qualitative approaches (Eysenck and Jr, 1981, Acitelli, 1992, Cheung, 2005, Qadir et al.,
34 2005, Wong and Goodwin, 2009, Lavner and Bradbury, 2010, Chen and Lim, 2012, Madanian et al.,
35 2013, Taniguchi and Kaufman, 2014, Tavakol et al., 2017, LeBaron et al., 2018). Quantitative ap-
36 proaches include self-ratings or rating by the opposite partner or others used to measure marital satis-
37 faction (Kolb and Straus, 1974, Gray-Little and Burks, 1983, Busby and Holman, 2009, Ward et al.,
38 2009). Regardless of what scale is used, it is found that marital satisfaction follows a U shaped change
39 over the period of time in Western (Anderson et al., 1983). However, VanLaningham et al. (2001) and
40 Kamo (1993) establish that marital satisfaction does not follow a U shaped pattern over the life course
41 in the USA and Japan, respectively. Rehman et al. (2011) examine the association between marital
42 satisfaction and communication behavior, demonstrating that conflict discussions are positively asso-
43 ciated with marital satisfaction. Tavakol et al. (2020) implement a qualitative approach to characterize
44 marital satisfaction among Iranian couples, finding that passing of time together and personal, fam-
45 ily & community have significant impacts on marital satisfaction. Overall, marital satisfaction does
46 not always reveal a U shaped pattern over the period of time and it is affected by sociodemographic,
47 personal and communication factors.

48 Inquisitiveness, a part of critical thinking, is a personal attribute that motivates people to im-
49 prove the problematic situation by increasing their curiosity and obtaining knowledge about new and
50 different environments (Garrison, 1991, Hirayama and Kusunoki, 2004, Nakagawa, 2016). An inquis-
51 itive person tends to communicate with other persons and they are perceived as bright, creative and
52 problem-solvers who deal with different issues in various fields (Yeh, 2002, Kawashima and Petrini,
53 2004, Hogan and Hogan, 2007). For example, Nakagawa (2016) find that inquisitiveness is positively
54 associated with the risk perception and earthquake preparedness in Japan. Hirayama and Kusunoki
55 (2004) investigate the effect of critical thinking disposition on drawing a conclusion in Japan, showing
56 that inquisitiveness is important to draw an appropriate conclusion. There is a scarcity of researches
57 that apply the inquisitiveness in the field of marriage, however, Goleman (1998), Bar-On and Parker
58 (2000) and Kulkarni and Jagtap (2010) define an emotional intelligence, a set of cognitive abilities
59 or skills, that affects people's ability to understand and manage their emotions to cope with different
60 environments. Overall, inquisitiveness shall be a crucial factor to increase motivation and communi-
61 cation by triggering curiosity and interaction with unfamiliar environments.

62 Although the positive relationship between marriage quality and happiness is well establish, sev-
63 eral important aspects are still unidentified. For instance, there is an empty room of what character-
64 izes a sense of good match with the partner and happiness in marriage. Having a sense of good match
65 with the partner in marriage is considered to be more stable than the marital satisfaction, because
66 it describes the present as well as the near future state of relationship. We examine what induces a
67 husband or wife to have a sense of good match, such as "my partner is in good match with me," as
68 well as how the husband's and wife's perceptions to the match or mismatch are related to his or her
69 happiness. The questionnaire surveys are conducted in Japan and data are collected from 247 married
70 couples where a couple is asked to provide separate and independent responses. With the data, this
71 study addresses the following three open questions: (i) Do sufficient future-planning discussion and
72 inquisitiveness play the role in maintaining a sense of good match and happiness?, (ii) How does the
73 sense of mis(match), along with the types of mismatch, contribute to individual happiness? and (iii)
74 How do sufficient future-planning discussion and inquisitiveness, along with the sense of mis(match),
75 affect individual happiness?

76 **2 Methods and Materials**

77 We conduct questionnaire surveys from 21 to 27 December 2020 sourced from the registered
78 of a web-based survey research organization, Cross marketing company limited, in Japan. Couples
79 with at least one child were selected as subjects in the questionnaire surveys. Our target was to
80 collect necessary information from 250 randomly selected couples. However, in total 247 couples
81 (494 subjects) successfully provided their separate and independent responses. During the surveys,
82 questionnaires were sent to the husband's and wife's personal e-mail address separately and they
83 provided their responses by using their own devices. Subjects were requested not to share and discuss
84 their responses with the partner when completing the questionnaire. Information was collected on
85 subjective happiness, sense of mis(match), amount of future-planning discussion, inquisitiveness and
86 sociodemographic variables through conducting our questionnaire surveys.

87 The subjective happiness scale developed by Lyubomirsky and Lepper is employed to measure
88 subjects' happiness (Lyubomirsky and Lepper, 1999). This scale uses a four-item measurement, in-
89 cluding the following statements: (1) "In general, I consider myself," (2) "Compared to my peers, I
90 consider myself," (3) "Some people are generally very happy. They enjoy life no matter what is going
91 on, getting the most of everything. How much does this sentence describe you?" and (4) "Some peo-
92 ple are generally not very happy. Although they are not depressed, they never seem as happy as they
93 might be. How much does this sentence describe you?" The first item accounts individual absolute
94 self-rated happiness where each subject is asked to choose an option by using a 7-point Likert scale
95 from "not a very happy person" to "a very happy person." The second item reports individual relative
96 happiness as compared to that of peers and its evaluations are based on a 7-point Likert scale form
97 "less happy" to "more happy." The other two items give a general description of a happy and unhappy
98 person where subjects are asked to choose an option by using a 7-point Likert scale from "not at all" to
99 "a great deal" for the best description of themselves. For calculating the overall subjective happiness,
100 we estimate the average of the four items, while the last item is coded reversely.

101 The sense of mis(match) is measured by both partners in a married couple. In this study, we apply
102 a 6-question measurement, where each question is rated on a 5-point Likert scale. Each subject is

103 asked to provide the reasons along with the answer of each question. The first and second questions
104 are corresponded to the family budget and time, by stating “Are you satisfied with the partner for
105 spending family budget and/or time for the family?” and its evaluations are “very satisfied” and “not
106 very satisfied.” The third question is related to a good understanding with each other, by stating “Do
107 you think that your partner has a good understanding of you with respect to your job, personality,
108 preferences, family matters and future planning?” and its evaluations are “very satisfied” and “not
109 very satisfied.” The fourth question is “Are you supportive to your partner about parenting and house-
110 hold activities?” and the evaluations are made on a 5-point Likert scale from “very supportive” to
111 “not very supportive.” The fifth question is “Do you respect to your partner as a person?” and its
112 evaluations are “very respected” and “not very respected.”

113 Questions 1 to 5 are designed to remind subjects about the sense of mis(match) with the partner
114 that has been built over the time in their marriage. In the sixth question, we ask about a sense of
115 good match with the partner, by stating “Do you think that the relationship with your partner is a
116 good match?” and its evaluations are “good match” and “not good match” on a 5-point Likert scale.
117 The concept of the match and mismatch used in this study is defined with the reference of self-self
118 match that is one of the matching evaluation methods of Gottman conflict styles developed Busby and
119 Holman (Busby and Holman, 2009). When both the husband and wife recognize that “my partner is in
120 good match with me” is defined as a good match and all other possibilities are defined as a mismatch.
121 Mismatch is divided into three parts: (i) Both-mismatch (both the husband and wife recognize that
122 they are in a mismatch), (ii) One-side mismatch (either husband or wife recognizes that he/she is in
123 a mismatch) and (iii) Other-mismatch (either husband or wife recognizes that he/she is in a neutral
124 position).

125 Each subject is asked about the time spending for future-planning, by stating “Do you feel that
126 you have enough time to discuss your future family planning (parenting policy, work, asset planning,
127 old age) with your partner?” The answer takes the value 1 when the subject mentions that she/he has
128 enough time to discuss future-planning with the partner, otherwise 0. A subscale of the critical think-
129 ing disposition scale created by Hirayama and Kusumi with ten items is utilized to measure subjects’
130 inquisitiveness (intellectual curiosity and flexible cognitive ability for new & different environments)

131 (Hirayama and Kusunoki, 2004). The items include 10 statements: (1) “I want to interact with people
 132 with various ways of thinking and learn a lot from them,” (2) “I want to keep learning new things
 133 throughout my life,” (3) “I like to challenge new things,” (4) “I want to learn about various cultures,”
 134 (5) “Learning how foreigners think is meaningful to me,” (6) “I am interested in people who have a
 135 different way of thinking,” (7) “I want to know more about any topic,” (8) “I want to learn as much as
 136 possible, even if I do not know if it is useful,” (9) “It is interesting to discuss with people who have
 137 different ideas than me” and (10) “I want to ask someone if I do not know.” The items are rated from
 138 “strongly agree” to “strongly disagree” on a 7-point Likert scale. All items are recoded reversely when
 139 calculated the sum of this scale. Information is collected on sociodemographic variables, such as age,
 140 household income, education and family structure during the questionnaire surveys. The definitions
 141 of the variables used in this study are summarized in table 1.

142 [Table 1 about here.]

143 We apply logit and mean-based median regressions to address the open questions posed in the
 144 introduction section: (i) Do sufficient future-planning discussion and inquisitiveness play the role in
 145 maintaining a sense of good match and happiness?, (ii) How does the sense of mis(match), along with
 146 the types of mismatch, contribute to individual happiness? and (iii) How do sufficient future-planning
 147 discussion and inquisitiveness, along with the sense of mis(match), affect individual happiness? For
 148 answering questions (i), (ii) and (iii), the logit and median regressions are used to characterize the
 149 sense of mis(match) and happiness as dependent variables, respectively, with the other important
 150 explanatory variables described in figure 1, enabling to identify the important factors. In the logit
 151 regression, let y_i denote a variable such that $y_i = 1$ if couple i has a sense of good match one another,
 152 and $y_i = 0$ otherwise, the model is as follows:

$$y_i = \alpha_0 + \alpha_1 F_i + \alpha_2 I_i + \alpha_3 \mathbf{Z}_i + \varepsilon_i \quad (1)$$

153 where F_i and I_i are the variables associated with future-planning discussion and inquisitiveness, re-
 154 spectively. \mathbf{Z}_i is a vector of sociodemographic variables, such as husband’s age, wife’s age, household
 155 income, husband’s education, wife’s education and family structure. The parameters α_0 , α_1 and α_2

156 are associated with the intercept, F_i , I_i , respectively, while α_3 is a vector of the parameter associated
157 with Z_i and ε_i is an error term.

158 We apply a mean-based median regression developed by Koenker and Bassett (1978) and Koenker
159 and Hallock (2001) to examine the effects of the sense mis(match) on happiness, after controlling
160 other factors and to statistically test the research questions (ii) and (iii). A median regression model
161 can be mathematically expressed as:

$$h_i = \beta_0 + \beta_1 M_i + \beta_2 F_i + \beta_3 I_i + \beta_4 Z_i + \varepsilon_i \quad (2)$$

162 where h_i is the subjective happiness variable for i th subject; F_i and I_i are the variables associated
163 with future-planning discussion and inquisitiveness, respectively. M_i and Z_i are the vectors of the
164 sense of mis(match) dummies and sociodemographic variables, respectively and ε_i is an error term.
165 The β_j s for $j = 0, 1, 2, 3, 4$ are the parameters associated with the intercept, M_i , F_i , I_i and Z_i , while
166 β_1 and β_4 are the vectors of the parameters, respectively.

167 With the regression analyses of equation (1) and equation (2), we are interested to examine a con-
168 ceptual framework for the relationships among future-planning discussion, inquisitiveness, sense of
169 mis(match) and happiness in figure 1. In this framework, our main focus is on estimating the regres-
170 sion coefficients α_1 , α_2 and α_3 as well as β_1 , β_2 , β_3 and β_4 in figure 1. A coefficient, for example
171 α_1 (β_1) represents the effect of future-planning discussion on sense of mis(match) (happiness) after
172 the effects of all other variables are netted out, while some possible mediator play roles on subjective
173 happiness through some explanatory variables.

174 [Figure 1 about here.]

175 **3 Results**

176 Table 2 presents the summary statistics of the key variables for husbands, wives and overall sub-
177 jects in the sample. The mean scores of subjective happiness for husbands, wives and the overall sam-
178 ple are mostly similar at 4.70, 4.57 and 4.64 points, respectively. Regarding the sense of mis(match),

179 59% subjects perceive that they are in a good match with the partner, while 41% subjects perceive
180 that they are in a mismatch with the partner. The percentages of subjects who recognize that they do
181 sufficient future-planning discussion with the partner are similar between husbands and wives (54%
182 and 53%). The scores of inquisitiveness for husbands and wives are 50.33 and 47.61 points, respec-
183 tively. There are no differences exist in terms of age and education between husbands and wives.
184 Overall, it can be interpreted as the key variables do not vary between husbands and wives.

185 [Table 2 about here.]

186 Table 3 summarizes the basic statistics of the key variables for the sense of match, mismatch and
187 overall subjects in the sample. Subjects having a sense of good match (the average subjective happi-
188 ness score is 5.00 points) are happier than subjects having a sense of mismatch (the average subjective
189 happiness score is 4.13 points). Regarding future-planning discussion, subjects who perceive a sense
190 of good match discuss more about future-planning with the partner (69%) than subjects having a
191 sense of mismatch (32%). The mean score of inquisitiveness is higher for subjects who have a sense
192 of good match (49.94 points) than subjects who have a sense mismatch (47.57 points). The overall
193 mean age for subjects is 43 years and they have an average annual income from 4 to 7 million yen.
194 Subjects usually receive a college degree and most of them belong to a nuclear family. However, so-
195 ciodemographic variables, such as age, household income, education and family structure do not vary
196 between sense of match and mismatch couples. Overall, subjects having a sense of good match are
197 happier, more curious and they spend more time for future-planning discussion than subjects having
198 a sense of mismatch.

199 [Table 3 about here.]

200 Figure 2 is a histogram that presents the distribution of subjective happiness for overall subjects
201 in the sample. The vertical axis represents the frequencies, while the horizontal axis presents objec-
202 tive happiness. The highest spike is observed at 5 points and the distribution of subjective happiness
203 appears to follow a skewed distribution. A Shapiro-Wilk normality test is applied with the null hy-
204 pothesis that the subjective happiness is normally distributed. We find that the null hypothesis is

205 rejected ($z = 1.81, p = 0.03$), meaning that the distribution of subjective happiness is not normally
206 distributed. Therefore, we employ a mean-based median regression to examine the effects of sense of
207 mis(match), future-planning discussion and inquisitiveness on happiness, while controlling for other
208 important sociodemographic variables.

209 [Figure 2 about here.]

210 Figure 3 is a boxplot that presents a difference in the distributions of subjective happiness between
211 sense of match and mismatch couples. Form the figure, it is clearly showed that subjects who perceive
212 that they are in a good match with the partner are happier than subjects who perceive that they are
213 in a mismatch with the partner. We apply a Mann-Whitney test with the null hypothesis that the
214 distributions of subjective happiness are the same between sense of match and mismatch couples. The
215 result of Mann-Whitney test confirms that there is a significant distributional difference of subjective
216 happiness between sense of match and mismatch couples ($z = -9.40, p = 0.01$). Overall, it can be
217 said that the sense of mis(march) has a strong influence on subjective happiness.

218 [Figure 3 about here.]

219 Table 4 reports the marginal effects of the explanatory variables on sense of mis(match) in the logit
220 regression with several model specifications. First, we include husband- and wife-side future-planning
221 discussion in Model 1 in the logit regression to examine the effects of future-planning discussion vari-
222 ables on sense of mis(match). The results demonstrate that the future-planning discussion from both
223 the husband's and wife's side is significant at 1 % level, meaning that the probability of having a sense
224 of good match increases by 25 % (26 %) when husbands (wives) do sufficient future-planning discus-
225 sion with his (her) partner than husbands (wives) who do not. This indicates that the discussion about
226 future-planning with the partner is an important factor to increase a sense of good match. Tilburg
227 and Igou (2019) report that visioning of a happy future helps people to understand the meaning of
228 everyday life. This results can be interpreted as the future-planning discussion influences couples'
229 imagination of a bright future and it gives the feeling of meaning of everyday life that stimulates a
230 sense of good match.

[Table 4 about here.]

231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257

Then, we exclude future-planning discussion and include inquisitiveness and other sociodemographic variables in Model 2 in the logit regression. Model 2 in the logit regression shows that the husband's inquisitiveness is significant at 5 % level, implying that the probability of having a sense of good match increases by 1 % for a 1 point increase in husband's inquisitiveness. This result suggests that husbands are curious and have cognitive ability of new and different environments that help them to understand the nature of problems and motivate them to take necessary actions for solving those problems. Inquisitiveness improves people's understanding level, evaluation and judgment and assists to build up their knowledge and experience (Facione et al., 1995, Bailin et al., 1999, Rapps et al., 2001). From Model 2 in the logit regression, we also find that household income is significant at 10 % level, indicating that the probability of having a sense of good match increases by 8 % for a 1 category increase in household income. Cherlin (1979) mention that household income has a positive effect on marriage quality because it contributes to the overall quality of life and stability, while Brennan et al. (2001) find that only males' income increases marital quality.

Finally, we include all the independent variables (future-planning discussion, inquisitiveness and sociodemographic) in Model 3 in the logit regression to check the robustness of our results. The main results of Model 3 do not differ from those of model 1 as well as the economic significances of the estimated coefficients for future-planning discussion and inquisitiveness variables almost remain the same. Moreover, Model 3 shows that the effects of future-planning discussion and inquisitiveness on sense of mis(match) from both the husband's and wife's side more precisely, while controlling for other important sociodemographic variables. These results demonstrate that future-planning discussion and inquisitiveness are consistent and robust factors of having a sense of good match, indicating future planning-discussion and husband's inquisitiveness are crucial to maintain a feeling of good chemistry between a husband and wife.

Table 5 presents the estimated coefficients of the explanatory variables on subjective happiness in the median regression with several model specifications. First, we include sense of mis(match) and future-planning discussion variables with their reference groups in Model 1 in the median regression

258 to examine the effects of sense of mis(match) and future-planning discussion on subjective happiness.
259 We find that sense of mis(match) and future-planning discussion are significant at 1 % levels. The
260 result reveals that “both-match” couples who recognize “my partner is in good match with me” one
261 another are much happier than couples who do not. However, the negative effect of happiness varies
262 depending on the types of sense of mismatch. When couples have a sense of mismatch from the both-
263 side (one-side and other), then the subjective happiness is likely to decrease by 1.75 (1.00 and 0.75)
264 points than couples have a sense of good match. The results can be interpreted as “both-mismatch”
265 couples who recognize that “my partner is NOT in good match with me” one another are the un-
266 happiest among any other type of mismatch couples. Vermunt et al. (1989) document that people’s
267 happiness is related to the feelings of satisfaction and dissatisfaction in every aspect of life. Regarding
268 future-planning discussion, the subjective happiness is likely to increase by 0.69 point when subjects
269 sufficiently discussed future-planning with the partner than subjects who do not, indicating that the
270 amount of future-planning discussion contributes to individual happiness.

271 [Table 5 about here.]

272 Then, we exclude sense of mis(match) and future-planning discussion and include inquisitiveness
273 and other sociodemographic variables in Model 2 in the median regression. Model 2 in the median
274 regression shows that inquisitiveness, age and age square are significant at 5 % and 10 % levels, imply-
275 ing that inquisitiveness and age are the important determinants of subjective happiness. The estimated
276 coefficient of inquisitiveness indicates that the likelihood of individual happiness increases by 0.02
277 point when a one point rise in inquisitiveness. The result suggests that inquisitiveness has a strong
278 influence on subjective happiness. The signs of both age and age square coefficients are positive and
279 significant, meaning that the subjective happiness increases with increasing age. An et al. (2020) find
280 a positive curvilinear relationship between age and happiness.

281 Model 3 in the median regression, we use all the independent variables included in Models 1 and
282 2, with their baseline specifications in table 5 to check the robustness of our findings and we confirm
283 that the main results in Model 3 do not vary from those of Models 1 and 2. However, the economic
284 significances of sense of mis(match) and future-planning discussion on subjective happiness reduce

285 slightly. Model 3 shows that the effects of sense of mis(match), future-planning discussion and inquis-
286 itiveness on the subjective happiness more accurately, while controlling for other sociodemographic
287 variables. The regression estimations confirm that sense of mis(match), future-planning discussion
288 and inquisitiveness are consistent and robust factors of subjective happiness. These results can be
289 interpreted as a sense of good match, sufficient future-planning discussion and high inquisitiveness
290 increase subjective happiness.

291 Figure 4 shows a path diagram for causal relationships among four variables, such as future plan-
292 ning discussion, inquisitiveness, sense of mis(match) and happiness. It is clear from the diagram that
293 the sense of mis(match) is a mediator between future-planning discussion (inquisitiveness) and happi-
294 ness. A structural equation modeling (SEM) is applied to address whether the sense of mis(match) is
295 a mediator or not, including the standardized estimates for the causal paths for the indirect and direct
296 effects of future-planning discussion and inquisitiveness on happiness (see, e.g., Weston and Gore,
297 2006, Gunzler et al., 2013, 2014, Venturini and Mehmetoglu, 2019). In SEM, five direct paths (A, B,
298 C, D and E) and two indirect paths (C' and D') are analyzed. These paths are found statistically signif-
299 icant at 1 % and 10 % levels, meaning that future-planning discussion and inquisitiveness affect hap-
300 piness directly and indirectly, where the sense of mis(match) is a mediator between future-planning
301 discussion (inquisitiveness) and happiness. This analyses establish that future-planning discussion,
302 inquisitiveness and sense of mis(match) are important factors for individual happiness through not
303 only their direct but also indirect effects, which is considered as another robustness check for our
304 regression analyses.

305 [Figure 4 about here.]

306 Now we are ready to provide the answers to our open research questions posed in the introduction
307 section. The first question is: “Do sufficient future-planning discussion and inquisitiveness play the
308 role in developing a sense of good match and happiness?” From summary statistics, test, diagrams
309 and regression analyses consistently show that future-planning discussion and inquisitiveness are the
310 important determinants to have a sense of good match and happiness. That means the answer of
311 this question is “yes,” i.e., future-planning discussion and husband inquisitiveness increase a sense of

312 good match between a husband and wife as well as happiness. The second question is: “How does
313 the sense of mis(match), along with the types of mismatch, contribute to individual happiness?” The
314 regression analyses show that “both-match” couples who recognize “my partner is in a good match
315 with me” one another are much happier than couples who do not, and “both-mismatch” couples who
316 recognize “my partner is NOT in good match with me” one another are the unhappiest among any
317 other type of mismatch couples. The third question is: “How do sufficient future-planning discussion
318 and inquisitiveness, along with the sense of mis(match), affect individual happiness?” The answer of
319 this question is that sufficient future-planning discussion and inquisitiveness are crucial for couples to
320 maintain a sense of good match between a husband and wife as well as enhance individual happiness
321 directly and indirectly through a mediator of the sense of mis(match).

322 **4 Discussion**

323 The study begins with a concern that what characterizes a sense of good match, such as “my
324 partner is in good match with me” and happiness in marriage. This study demonstrates that the
325 future-planning discussion positively influences a sense of good match as well as happiness. Previous
326 studies document that imagining future events may influence the human way of thinking and strategies
327 for taking decisions (Szpunar et al., 2014, Corcoran et al., 2017, González-Ricoy and Gosseries,
328 2017). For example, Nakagawa et al. (2019) examine how projecting the future affects the way
329 of thinking of individual preferences for policies. Through projected longevity events couples can
330 imagine themselves in a long-lasting relationship that increases commitment and communication,
331 resulting in high marital quality (Thompson-Hayes and Webb, 2004). Imagining a bright and happy
332 future invites people to discover the meaning of life (Tilburg and Igou, 2019). Based on the above
333 discussion, sufficient future-planning discussion enhances the way of thinking and communication
334 behavior that stimulate a sense of good match between a husband and wife as well as happiness.

335 Inquisitiveness is a personal attribute of curiosity & acceptance to something new and someone
336 different that motivates people to communicate with others by asking questions and pursues to gather
337 information (Blickle et al., 2014, Bardone and Secchi, 2017, Watson, 2019). Inquisitiveness is a power

338 that triggers persons to interact and communicate with others and adjust themselves in unfamiliar en-
339 vironments Black (2005). If this is the case, then inquisitiveness may be regarded as an instrument
340 that assists couples to understand each other and accept their problems, therefore they can maintain a
341 feeling of good chemistry with the partner in the marital relationship. Inquisitiveness can be consid-
342 ered to acquire or further enhance through education, experiences and training (Toplak and Stanovich,
343 2002, Sannomiya and Yamaguchi, 2016, Fusaro and Smith, 2018). If this is true, then the feeling of
344 good match and happiness will increase in the societies, as people become inquisitive through the
345 education, experiences and training.

346 But now the key question is “why does only the husband’s inquisitiveness contribute to main-
347 tain a sense of good match?” We argue that the cultural and lifestyle differences of a husband and
348 wife are responsible to make only the husband curious and knowledgeable about new and different
349 environments. Historically, in Japanese society, a woman has a special role at the house and has
350 taken autonomy. In the modern time, even with the advancement of woman’s education and social
351 empowerment, the role that a woman plays in the house has not been changed. The key role for a
352 woman is still the housework and child-rearing. In this study, the fact is only the husband’s inquis-
353 itiveness (intellectual curiosity and flexible cognitive ability) positively influences a sense of good
354 match, meaning that a husband has a strong ability to accept the wife’s way of thinking (housework,
355 child-rearing, work-family balance) even though each family has a different division of employment
356 status and household chores.

357 The findings of the study provide implications for academic researchers, policymakers and general
358 people regardless of the developing and developed countries. Having a sense of good match with
359 the partner and counterpart in any relation between two agents is important for maintaining a long-
360 lasting relationship and reducing the rate of divorce. This research findings would be helpful to
361 analyze the partnership formation, such as a firm searching an employee, a single partner finding
362 a marriage partner, a friend searching for a good friend and a student finding a good. This study
363 adds additional evidence in the existing literature by showing that future-planning discussion and
364 inquisitiveness contribute to maintain a sense of good match and happiness as well as may be helpful
365 to achieve SDG goal 3 within the expected time frame. It is well documented that subjective wellbeing

366 positively related to the achievement of SDGs (De Neve and Sachs, 2020, Kim et al., 2021).

367 **5 Conclusion**

368 We have empirically examined what induces a husband or wife to have a sense of good match,
369 “my partner is in good match with me,” and how the husband’s and wife’s perceptions to the match
370 or mismatch are related to his or her happiness. The questionnaire surveys were conducted in Japan
371 and data are collected from 247 married couples where a couple is asked to provide separate and
372 independent responses. The main findings are: (i) a husband’s inquisitiveness (intellectual curiosity
373 and flexible cognitive ability) and a couple’s recognition to the amount of family future-planning
374 discussion not only positively influence having a sense of good match but also contribute to individual
375 happiness. (ii) “both-match” couples who recognize “my partner is in good match with me” one
376 another are much happier than couples who do not, and “both-mismatch” couples who recognize “my
377 partner is NOT in good match with me” one another are the unhappiest among any other type of
378 mismatch couples. Overall, sufficient future-planning discussion and a personal attribute of curiosity
379 & acceptance to something new and/or different are identified to be the main drivers for couples to
380 maintain a feeling of good chemistry, enhancing individual happiness directly and indirectly through
381 a mediator of having the sense of mis(match).

382 Some limitations and the direction for future research are noted here. The questionnaire surveys
383 do not consider how couples get married or how much time they shared with the partner before the
384 marriage. In future research, it is necessary to include such questions that consider how the length
385 of time shared before marriage where the love marriage is the majority in a society. There is a
386 possibility to find a different result where the majority of marriage is an arranged marriage or where
387 sexual diversity is recognized. For increasing overall well-being in the society, the following questions
388 would be addressed properly: (i) How much newness and differences are allowed to each other and
389 how can you keep your curiosity about it? (2) How much would you discuss and implement future
390 family planning with your partner? These caveats notwithstanding, it is important to have a sense of
391 good match with the partner in a married couple for maintaining a stable and happy life.

References

- Acitelli, L. (1992). Gender differences in relationship awareness and marital satisfaction among young married couples. *Personality and social psychology bulletin*, 18:102–110.
- An, H., Chen, W., Wang, C., Yang, H., Huang, W., and Fan, S. (2020). The relationships between physical activity and life satisfaction and happiness among young, middle-aged, and older adults. *International journal of environmental research and public health*, 17:4817.
- Anderson, S., Russell, C., and Schumm, W. (1983). Perceived marital quality and family life-cycle categories: A further analysis. *Journal of marriage and family*, 45:127–139.
- Bailin, S., Case, R., Coombs, J., and Daniels, L. (1999). Conceptualizing critical thinking. *Journal of curriculum studies*, 31:285–302.
- Bar-On, R. and Parker, J. (2000). *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace*. Jossey-Bass.
- Bardone, E. and Secchi, D. (2017). Inquisitiveness: Distributing rational thinking. *Team performance management*, 23:66–81.
- Berscheid, E. (1985). Compatibility, interdependence, and emotion. In *Compatible and incompatible relationships*, pages 143–161. Springer Series in Social Psychology.
- Black, S. (2005). The mindset of global leaders: Inquisitiveness and duality. In *Advances in global leadership*. Emerald Group Publishing Limited.
- Blickle, G., Meurs, J., Wihler, A., Ewen, C., and Peiseler, A. (2014). Leader inquisitiveness, political skill, and follower attributions of leader charisma and effectiveness: Test of a moderated mediation model. *International journal of selection and assessment*, 22:272–285.
- Brennan, R., Barnett, R., and Gareis, K. (2001). When she earns more than he does: A longitudinal study of dual-earner couples. *Journal of marriage and family*, 63:168–182.

- Burdett, K. and Coles, M. (1999). Long-term partnership formation: Marriage and employment. *Economic journal*, 109:F307–F334.
- Busby, D. and Holman, T. (2009). Perceived match or mismatch on the Gottman conflict styles: Associations with relationship outcome variables. *Family process*, 48:531–545.
- Carr, D., Freedman, V., Cornman, J., and Schwarz, N. (2014). Happy marriage, happy life? Marital quality and subjective well-being in later life. *Journal of marriage and family*, 76:930–948.
- Chapman, B. and Guven, C. (2016). Revisiting the relationship between marriage and wellbeing: Does marriage quality matter? *Journal of happiness studies*, 17:533–551.
- Chen, J. and Lim, S. (2012). Factors impacting marital satisfaction among urban mainland Chinese women: A qualitative study. *Asia pacific journal of counselling and psychotherapy*, 3:149–160.
- Chen, M. (2018). Does marrying well count more than career? Personal achievement, marriage, and happiness of married women in urban China. *Chinese sociological review*, 50:240–274.
- Cherlin, A. (1979). Work life and marital dissolution. In *Divorce and separation: Context, causes and consequences*, pages 151–166. Basic Books New York.
- Cheung, M. (2005). A cross-cultural comparison of gender factors contributing to long-term marital satisfaction: A narrative analysis. *Journal of couple and relationship therapy*, 4:51–78.
- Corcoran, P., Weakland, J., and Wals, A. (2017). *Envisioning futures for environmental and sustainability education*. Wageningen Academic Publishers.
- De Neve, J. and Sachs, J. (2020). The SDGs and human well-being: A global analysis of synergies, trade-offs, and regional differences. *Scientific reports*, 10:1–12.
- England, P. (2001). The case for marriage: Why married people are happier, healthier, and better off financially. *Contemporary sociology*, 30:564–565.
- Eysenck, H. and Jr, J. W. (1981). Psychological factors as predictors of marital satisfaction. *Advances in behaviour research and therapy*, 3:151–192.

- Facione, P., Sanchez, C., Facione, N., and Gainen, J. (1995). The disposition toward critical thinking. *Journal of general education*, 44:1–25.
- Frey, B. and Stutzer, A. (2005). Happiness research: State and prospects. *Review of social economy*, 63:207–228.
- Fusaro, M. and Smith, M. (2018). Preschoolers' inquisitiveness and science-relevant problem solving. *Early childhood research quarterly*, 42:119–127.
- Garrison, R. (1991). Critical thinking and adult education: A conceptual model for developing critical thinking in adult learners. *International journal of lifelong education*, 10:287–303.
- Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.
- González-Ricoy, I. and Gosseries, A. (2017). *Institutions for future generations*. Oxford University Press.
- Gray-Little, B. and Burks, N. (1983). Power and satisfaction in marriage: A review and critique. *Psychological bulletin*, 93:513–538.
- Gunzler, D., Chen, T., Wu, P., and Zhang, H. (2013). Introduction to mediation analysis with structural equation modeling. *Shanghai archives of psychiatry*, 25:390–394.
- Gunzler, D., Tang, W., Lu, N., Wu, P., and Tu, X. (2014). A class of distribution-free models for longitudinal mediation analysis. *Psychometrika*, 79:543–568.
- Hirayama, R. and Kusunoki, T. (2004). Effects of critical thinking attitudes on the conclusion derivation process. *Japanese journal of educational psychology research*, 52:186–198.
- Hogan, R. and Hogan, J. (2007). *The Hogan personality inventory*. Hogan Assessment Systems.
- Kamo, Y. (1993). Determinants of marital satisfaction: A comparison of the United States and Japan. *Journal of social and personal relationships*, 10:551–568.

- Kaufman, G. and Taniguchi, H. (2010). Marriage and happiness in Japan and the United States. *International journal of sociology of the family*, 36:25–48.
- Kawashima, A. and Petrini, M. (2004). Study of critical thinking skills in nursing students and nurses in Japan. *Nurse education today*, 24:286–292.
- Kim, M., Hall, M., and Han, H. (2021). Behavioral influences on crowdfunding SDG initiatives: The importance of personality and subjective well-being. *Sustainability*, 13:3796.
- Kimbrough, S. and Kuo, A. (2010). On heuristics for two-sided matching: Revisiting the stable marriage problem as a multiobjective problem. In *Proceedings of the 12th annual conference on genetic and evolutionary computation*, pages 1283–1290.
- Koenker, R. and Bassett, G. (1978). Regression quantiles. *Econometrica*, 46:33–50.
- Koenker, R. and Hallock, K. (2001). Quantile regression. *Journal of economic perspectives*, 15:143–156.
- Kolb, T. and Straus, M. (1974). Marital power and marital happiness in relation to problem-solving ability. *Journal of marriage and family*, 36:756–766.
- Kulkarni, A. L. P. and Jagtap, P. (2010). Emotional intelligence and marital satisfaction. *Journal of psychological researches*, 5:185–194.
- Lavner, J. and Bradbury, T. (2010). Patterns of change in marital satisfaction over the newlywed years. *Journal of marriage and family*, 72:1171–1187.
- LeBaron, A., Kelley, H., and Carroll, J. (2018). Money over marriage: Marriage importance as a mediator between materialism and marital satisfaction. *Journal of family and economic issues*, 39:337–347.
- Lee, K. and Ono, H. (2008). Specialization and happiness in marriage: A US–Japan comparison. *Social science research*, 37:1216–1234.

- Lucas, R. and Clark, A. (2006). Do people really adapt to marriage? *Journal of happiness studies*, 7:405–426.
- Lucas, R., Clark, A., Georgellis, Y., and Diener, E. (2003). Reexamining adaptation and the set point model of happiness: Reactions to changes in marital status. *Journal of personality and social psychology*, 84:527–539.
- Lyubomirsky, S. and Lepper, H. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social indicator research*, 46:137–155.
- Madanian, L., Mansor, S., and bin Omar, A. (2013). Marital satisfaction of Iranian female students in Malaysia: A qualitative study. *Procedia-social and behavioral sciences*, 84:987–993.
- Meunier, V. and Baker, W. (2012). Positive couple relationships: The evidence for long-lasting relationship satisfaction and happiness. In *Positive relationships*, pages 73–89. Springer.
- Musick, K. and Bumpass, L. (2012). Reexamining the case for marriage: Union formation and changes in well-being. *Journal of marriage and family*, 74:1–18.
- Nakagawa, Y. (2016). Effect of critical thinking disposition on household earthquake preparedness. *Natural hazards*, 81:807–828.
- Nakagawa, Y., Kotani, K., Matsumoto, M., and Saijo, T. (2019). Intergenerational retrospective viewpoints and individual policy preferences for future: A deliberative experiment for forest management. *Futures*, 105:40–53.
- O’Connell, M. (2008). *The marriage benefit: The surprising rewards of staying together in midlife*. New York: Springboard Press.
- Perelli-Harris, B., Hoherz, S., Lappegård, T., and Evans, A. (2019). Mind the “happiness” gap: The relationship between cohabitation, marriage, and subjective well-being in the United Kingdom, Australia, Germany, and Norway. *Demography*, 56:1219–1246.

- Qadir, F., Silva, P., Martin, P., and Khan, M. (2005). Marital satisfaction in Pakistan: A pilot investigation. *Sexual and relationship therapy*, 20:195–209.
- Qari, S. (2014). Marriage, adaptation and happiness: Are there long-lasting gains to marriage? *Journal of behavioral and experimental economics*, 50:29–39.
- Rapps, J., Riegel, B., and Glaser, D. (2001). Testing a predictive model of what makes a critical thinker. *Western journal of nursing research*, 23:610–626.
- Rehman, U., Janssen, E., Newhouse, S., Heiman, J., Holtzworth-Munroe, A., Fallis, E., and Rafaeli, E. (2011). Marital satisfaction and communication behaviors during sexual and nonsexual conflict discussions in newlywed couples: A pilot study. *Journal of sex and marital therapy*, 37:94–103.
- Sannomiya, M. and Yamaguchi, Y. (2016). Creativity training in causal inference using the idea post-exposure paradigm: Effects on idea generation in junior high school students. *Thinking skills and creativity*, 22:152–158.
- Stack, S. and Eshleman, J. (1998). Marital status and happiness: A 17-nation study. *Journal of marriage and family*, 60:527–536.
- Stutzer, A. and Frey, B. (2006). Does marriage make people happy, or do happy people get married? *Journal of socio-economics*, 35:326–347.
- Svarer, M. (2005). Two tests of divorce behaviour on Danish marriage market data. *Nationaløkonomisk tidsskrift*, 143:416–32.
- Szpunar, K., Spreng, R., and Schacter, D. (2014). A taxonomy of prospection: Introducing an organizational framework for future-oriented cognition. *Proceedings of the national academy of sciences of the United States of America*, 111:18414–18421.
- Taniguchi, H. and Kaufman, G. (2014). Gender role attitudes, troubles talk, and marital satisfaction in Japan. *Journal of social and personal relationships*, 31:975–994.

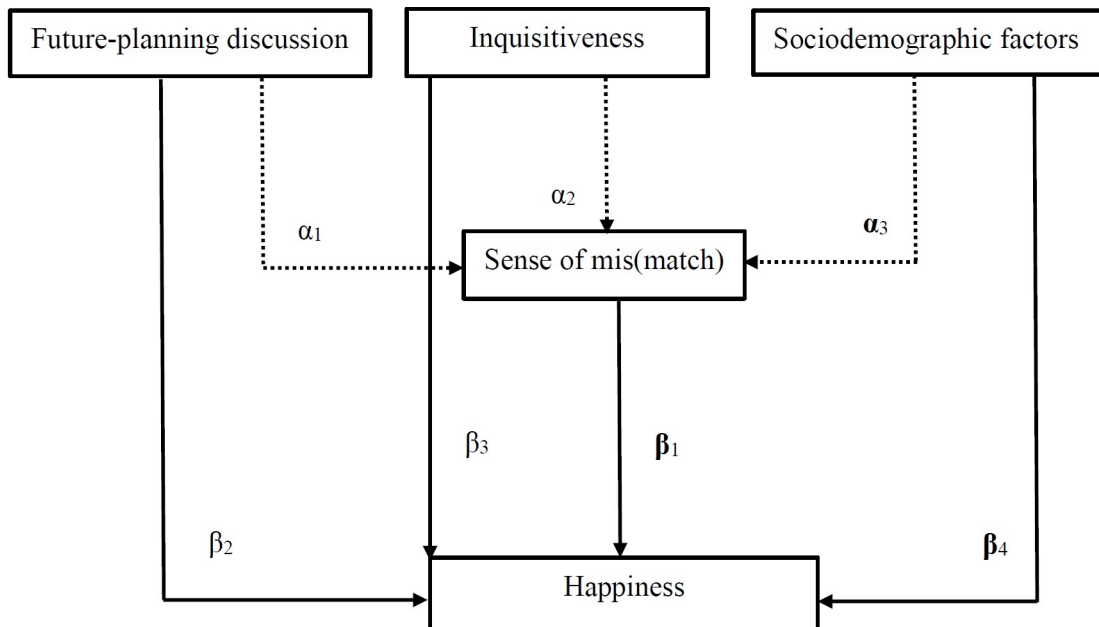
- Tao, H. (2019). Marriage and happiness: Evidence from Taiwan. *Journal of happiness studies*, 20:1843–1861.
- Tavakol, Z., Moghadam, Z., and Nasrabadi, N. (2020). Marriage, a way to achieve relaxing evolution: A grounded theory investigation. *Journal of education and health promotion*, 9:1–7.
- Tavakol, Z., Nasrabadi, A., Moghadam, Z., Salehiniya, H., and Rezaei, E. (2017). A review of the factors associated with marital satisfaction. *Galen medical journal*, 6:197–207.
- Thompson-Hayes, M. and Webb, L. (2004). Theory in progress: Commitment under construction: A dyadic and communicative model of marital commitment. *Journal of family communication*, 4:249–260.
- Tiefenbach, T. and Kohlbacher, F. (2015). Happiness in Japan in times of upheaval: Empirical evidence from the national survey on lifestyle preferences. *Journal of happiness studies*, 16:333–366.
- Tilburg, W. and Igou, E. (2019). Dreaming of a brighter future: Anticipating happiness instills meaning in life. *Journal of happiness studies*, 20:541–559.
- Toplak, M. and Stanovich, K. (2002). The domain specificity and generality of disjunctive reasoning: Searching for a generalizable critical thinking skill. *Journal of educational psychology*, 94:197–209.
- Tsou, M. and Liu, J. (2001). Happiness and domain satisfaction in Taiwan. *Journal of happiness studies*, 2:269–288.
- Vanassche, S., Swicegood, G., and Matthijs, K. (2013). Marriage and children as a key to happiness? Cross-national differences in the effects of marital status and children on well-being. *Journal of happiness studies*, 14:501–524.
- VanLaningham, J., Johnson, D., and Amato, P. (2001). Marital happiness, marital duration, and the U-shaped curve: Evidence from a five-wave panel study. *Social forces*, 79:1313–1341.

- Venturini, S. and Mehmetoglu, M. (2019). plssem: A stata package for structural equation modeling with partial least squares. *Journal of statistical software*, 88:1–35.
- Vermunt, R., Spaans, E., and Zorge, F. (1989). Satisfaction, happiness and well-being of Dutch students. *Social indicator research*, 21:1–33.
- Wadsworth, T. (2016). Marriage and subjective well-being: How and why context matters. *Social indicator research*, 126:1025–1048.
- Waite, L. and Gallagher, M. (2001). *The case for marriage: Why married people are happier, healthier, and better off financially*. New York: Crown Publishing Group.
- Ward, P., Lundberg, N., Zabriskie, R., and Berrett, K. (2009). Measuring marital satisfaction: A comparison of the revised dyadic adjustment scale and the satisfaction with married life scale. *Marriage and family review*, 45:412–429.
- Watson, L. (2019). Educating for inquisitiveness: A case against exemplarism for intellectual character education. *Journal of moral education*, 48:303–315.
- Weston, R. and Gore, J. (2006). A brief guide to structural equation modeling. *Counseling psychologist*, 34:719–751.
- Wong, S. and Goodwin, R. (2009). Experiencing marital satisfaction across three cultures: A qualitative study. *Journal of social and personal relationships*, 26:1011–1028.
- Yeh, M. (2002). Assessing the reliability and validity of the Chinese version of the California critical thinking disposition inventory. *International journal of nursing studies*, 39:123–132.
- Yoo, G. and Lee, S. (2019). The associations of national context and subjective well-being with marriage expectations among Korean, Chinese, and Vietnamese emerging adults. *Journal of child and family studies*, 28:1998–2006.
- Zimmermann, A. and Easterlin, R. (2006). Happily ever after? Cohabitation, marriage, divorce, and happiness in Germany. *Population and development review*, 32:511–528.

List of Figures

1	A conceptual framework describing the relationships among future-planning, inquisitiveness, sense of mis(match) and happiness	26
2	Frequency distribution of subjective happiness	27
3	A boxplot between subjective happiness and sense of mis(match)	28
4	A diagram for the mediation analysis	29

Figure 1: A conceptual framework describing the relationships among future-planning, inquisitiveness, sense of mis(match) and happiness



..... \rightarrow : One-way relationship for sense of mis(match)
 ————— \rightarrow : One-way relationship for happiness
 $\alpha_1, \alpha_2, \alpha_3$: Single coefficients toward sense of mis(match)
 $\beta_1, \beta_2, \beta_3, \beta_4$: Single coefficients toward happiness

Figure 2: Frequency distribution of subjective happiness

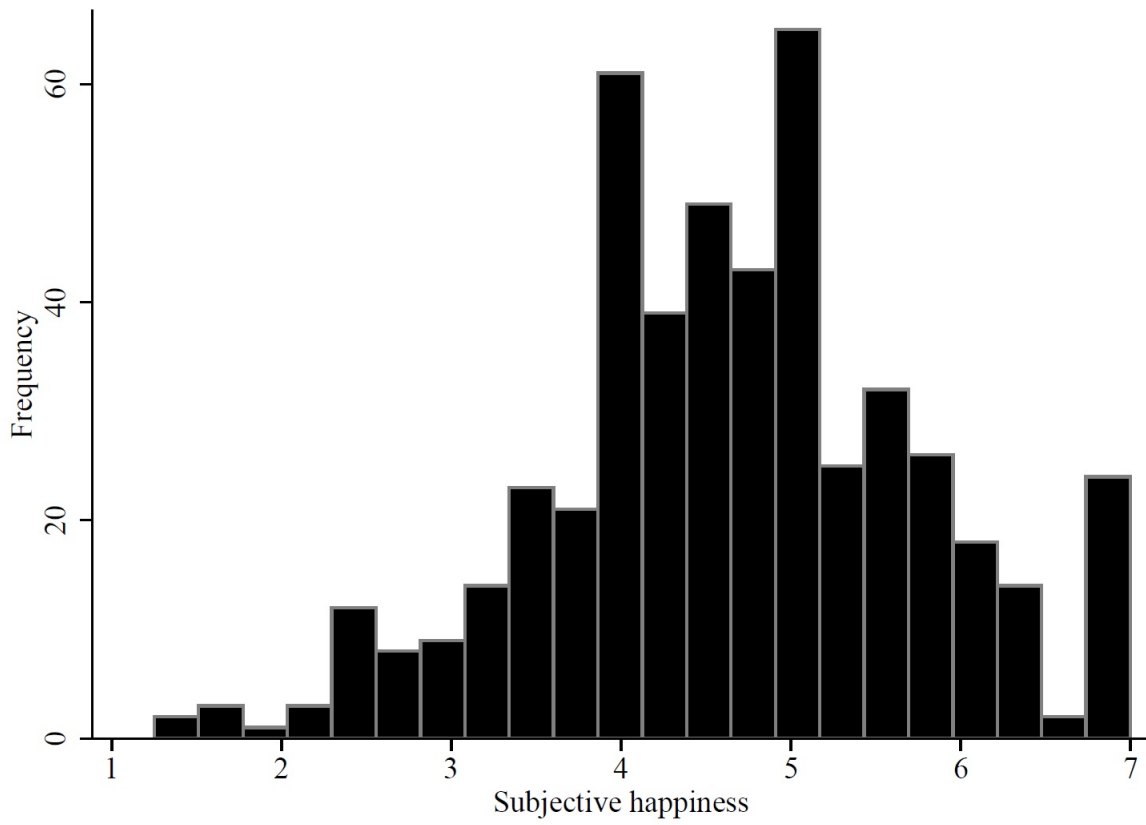


Figure 3: A boxplot between subjective happiness and sense of mis(match)

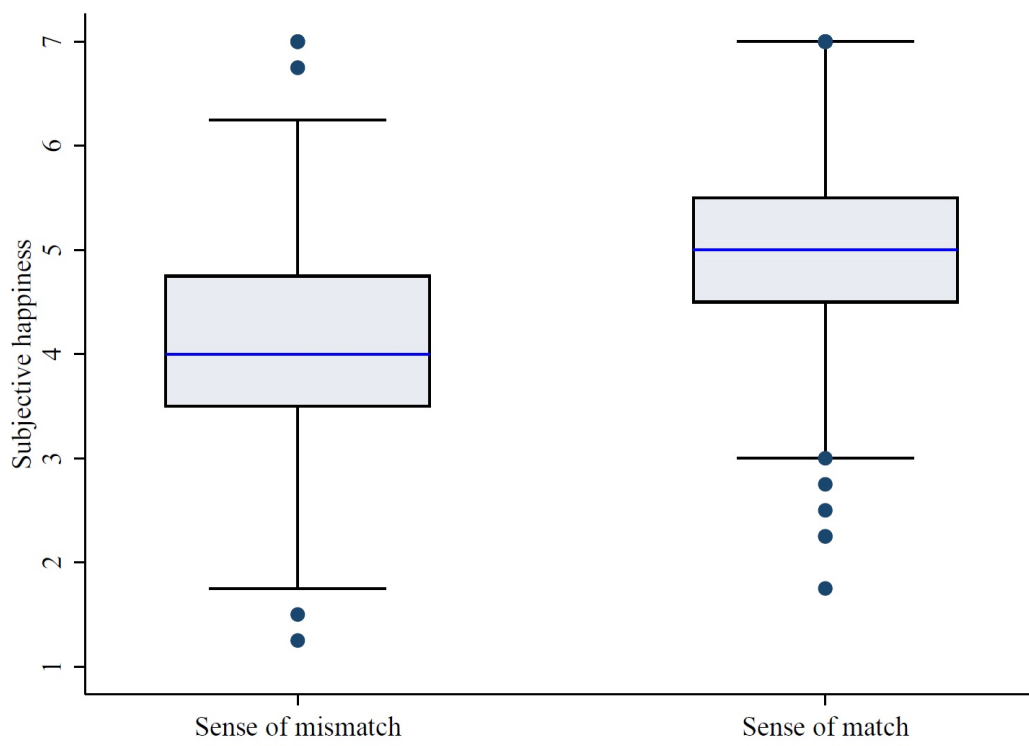
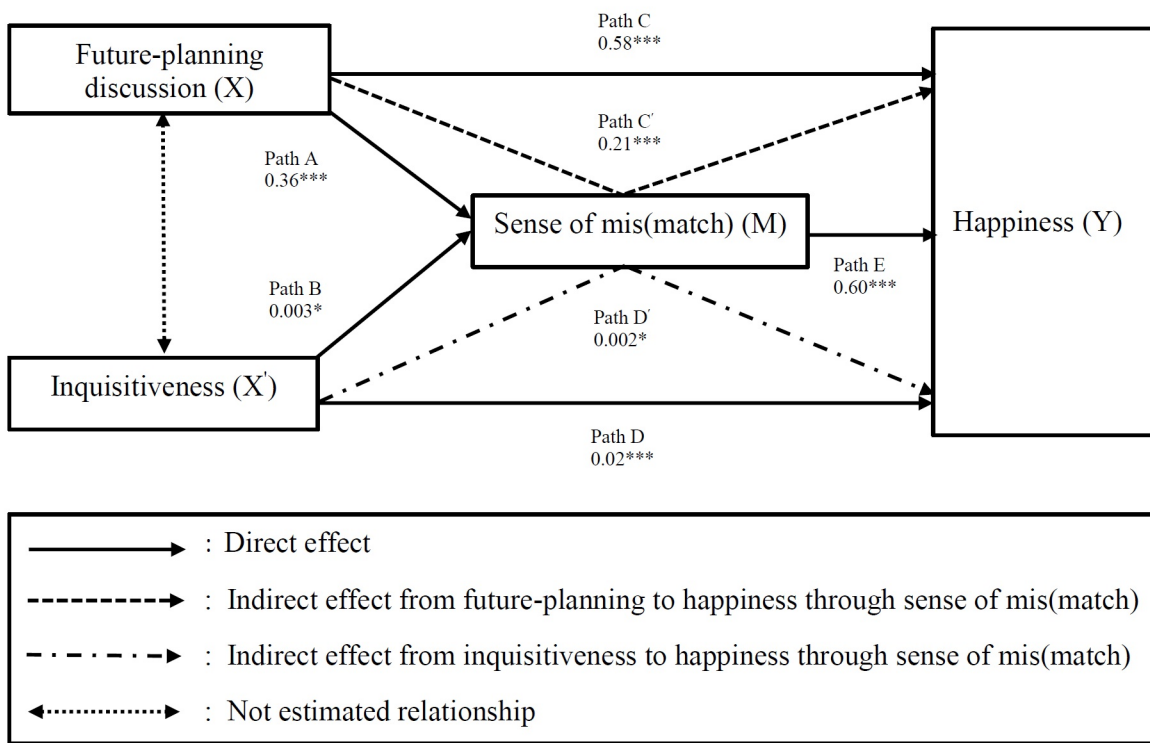


Figure 4: A diagram for the mediation analysis



List of Tables

1	Definitions of variables	31
2	Summary statistics of the key variables by husbands and wives	32
3	Summary statistics of the key variables by the sense of match and mismatch	33
4	Marginal effects of the independent variables on match in the logit regressions	34
5	Estimated coefficients of the independent variables on happiness in the median regressions	35

Table 1: Definitions of variables

Variables	Description
Dependent variables	
Happiness	Average scores
Sense of match	Takes the value 1 if couples recognize “my partner is in good match with me” one another in the marital relationship, otherwise 0.
Independent variables	
Sense of mis(match) (Base group = Both-match)	Both-mismatch (1) and Both-match (0)
Both-mismatch	One-side mismatch (1) and Both-match (0)
One-side mismatch	Other-mismatch (1) and Both-match (0)
Other-mismatch	Takes the value 1 when the subjects answered they have enough time to discuss future family-planning (parenting policy, work, asset planning, old age) with their partner, otherwise 0.
Future-planning discussion	
Inquisitiveness	
Gender	Female (0) and Male (1)
Age	Years
Household income	Household annual income categorized from 1 to 7 (1 = less than 1 million yen, 2 = 1 million yen to less than 2.5 million yen, 3 = 2.5 million yen to less than 4 million yen, 4 = 4 million yen to less than 7 million yen, 5 = 7 million yen to less than 10 million yen, 6 = 10 million yen to less than 20 million yen, 7 = 20 million yen or more)
Education	Academic qualification categorized from 1 to 6 (1 = junior high school graduation, 2 = high school graduation, 3 = vocational school, junior college, technical college graduation, 4 = undergraduate graduation, 5 = master’s degree graduation, 6 = doctoral degree graduation)
Family structure	Extended family (0) and Nuclear family (1)

Table 2: Summary statistics of the key variables by husbands and wives

	Husbands					Wives					Overall				
	Mean	SD	Max	Min		Mean	SD	Max	Min		Mean	SD	Max	Min	
Happiness	4.70	1.12	7.00	1.25		4.57	1.01	7.00	1.75		4.64	1.06	7.00	1.25	
Sense of match	-	-	-	-		-	-	-	-		0.59	0.49	1.00	0.00	
Sense of mismatch	-	-	-	-		-	-	-	-		0.41	0.49	1.00	0.00	
Both-mismatch	-	-	-	-		-	-	-	-		0.04	0.21	1.00	0.00	
One-side mismatch	-	-	-	-		-	-	-	-		0.06	0.23	1.00	0.00	
Other-mismatch	-	-	-	-		-	-	-	-		0.31	0.46	1.00	0.00	
Future-planning discussion	0.54	0.50	1.00	0.00		0.53	0.50	1.00	0.00		0.54	0.50	1.00	0.00	
Inquisitiveness	50.33	11.52	70.00	14.00		47.61	11.58	70.00	18.00		48.96	11.61	70.00	14.00	
Age	43.50	8.63	62.00	26.00		42.10	8.55	59.00	26.00		42.80	8.61	62.00	26.00	
Household income	-	-	-	-		-	-	-	-		4.46	1.04	7.00	1.00	
Education	3.27	1.08	6.00	1.00		2.81	1.19	5.00	1.00		3.04	1.16	6.00	1.00	
Family structure	-	-	-	-		-	-	-	-		0.86	0.35	1.00	0.00	
Sample size	247					247					494				

Table 3: Summary statistics of the key variables by the sense of match and mismatch

	Sense of match			Sense of mismatch			Overall		
	Mean	SD	Min	Mean	SD	Min	Mean	SD	Min
Happiness	5.00	0.93	1.75	4.13	1.03	1.25	4.64	1.06	1.25
Future-planning discussion	0.69	0.46	0.00	0.32	0.47	0.00	0.54	0.50	0.00
Inquisitiveness	49.94	11.93	18.00	47.57	11.01	14.00	48.96	11.61	14.00
Age	42.81	9.01	26.00	42.87	8.03	28.00	42.80	8.61	26.00
Household income	4.56	1.05	2.00	4.31	1.00	1.00	4.46	1.04	1.00
Education	3.07	1.17	1.00	3.00	1.15	1.00	3.04	1.16	1.00
Family structure	0.84	0.37	0.00	0.88	0.32	0.00	0.86	0.35	0.00
Sample size	290			204			494		

Table 4: Marginal effects of the independent variables on match in the logit regressions

	Sense of match (Base group = Sense of mismatch)		
	Model 1	Model 2	Model 3
Husband-side future-planning discussion (Base group = Others)	0.25*** (0.08)		0.23*** (0.08)
Wife-side future-planning discussion (Base group = Others)	0.26*** (0.08)		0.29*** (0.08)
Husband's inquisitiveness		0.01** (0.003)	0.01** (0.003)
Wife's inquisitiveness		-0.001 (0.003)	-0.003 (0.003)
Husband's age		0.001 (0.009)	0.00004 (0.001)
Wife's age		-0.004 (0.01)	-0.01 (0.01)
Household income		0.08* (0.04)	0.07* (0.04)
Husband's education		-0.02 (0.03)	-0.01 (0.04)
Wife's education		0.01 (0.03)	0.01 (0.03)
Family structure (Base group = Extended family)		-0.16 (0.10)	-0.15 (0.11)
Sample size	247	247	247

***significant at the 1 percent level, **at the 5 percent level and *at the 10 percent level. Numbers in parentheses are standard errors.

Table 5: Estimated coefficients of the independent variables on happiness in the median regressions

	Happiness		
	Model 1	Model 2	Model 3
Sense of mis(match) (Base group = Both-match)			
Both-mismatch	-1.75*** (0.23)		-1.56*** (0.25)
One-side mismatch	-1.00*** (0.20)		-0.52*** (0.23)
Other-mismatch	-0.75*** (0.10)		-0.49*** (0.12)
Future-planning discussion (Base group = Others)	0.69*** (0.09)		0.41*** (0.11)
Inquisitiveness		0.02** (0.004)	0.02** (0.004)
Gender (Base group = Female)		0.06 (0.10)	0.06 (0.10)
Age		0.01* (0.01)	0.01 (0.01)
Age square		0.001** (0.001)	0.001* (0.001)
Household income		0.05 (0.05)	0.03 (0.05)
Education		0.001 (0.04)	0.01 (0.05)
Family structure (Base group = Extended family)		-0.01 (0.14)	0.11 (0.15)
Sample size	494	494	494

***significant at the 1 percent level, **at the 5 percent level and *at the 10 percent level.
Numbers in parentheses are standard errors.