

An Experimental Approach to the Joint Effects of Relations with Partner, Friends and Parents on Happiness

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Personal relations constitute an important life domain and satisfaction therein affects happiness in people. In an experimental approach with a 3×3×3 vignettes study in which 103 first year psychology students participated, the contribution of the quality of relationships with parents, friends, and a partner are studied. It is found that the studied relationships contribute to imagined happiness according to an averaging model with equal weights, whereby relationship with a partner is weighted the most important, followed by the relationship, with friends and parents respectively. The averaging model implies that the impact of the quality of the one kind of relationship can be compensated for by the effect from another kind of relationship. The equal weighting implies that the impact of each kind of relationships (parents, friends, and a partner), within the relationships domain, is constant and so does not depend on its quality. Moreover, it seems that at some high level of satisfaction the positive effect of a very good relationship with a partner cannot further be increased by better relationship with friends. Further research with participants from different age groups is needed to further understand the impact of relations with parents, friends, and a partner on happiness.

INTRODUCTION

People are not made to walk alone. Indeed, personal relations seem to constitute an important factor in people's lives. Theory about social relations states that the need to relate motivates people's actions and, that

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the level of satisfaction of this need, influences their emotions and subjective wellbeing (Baumeister & Leary, 1995; Cummins, 1996, 1997; WHO, 2000). This need has been labeled “belongingness”, which has been described as the phenomenon that humans have a pervasive drive to form and maintain some minimum number of lasting positive and significant interpersonal relationships (Baumeister & Leary, 1995).

It has been shown that the absence of close personal relationships is strongly related to unhappiness (Argyle, 1999 ; Myers, 1992). High levels of subjective wellbeing and happiness have been reported in people with high belongingness motivation (McAdams & Bryan, 1978). Moreover, the quality of relationships between adolescents and their peers and parents have been found to affect self-esteem and life satisfaction considerably (Armsden & Greenberg, 1987). Also, romantic bonding seems of utter importance to people (Kamp Dush & D’Amato, 2005 ; Chen, Cohen, Kasen, Gordan, Dufur & Smailes, 2004 ; Diener & Lucas, 2000 ; Kim & Hatfield, 2004 ; McCabe & Cummins, 1998 ; Milardo, Johnson & Huston, 1983 ; Myers, 1992). It seems that different kinds of relations have considerable impact on positive feelings. However, it seems interesting to investigate whether all kinds of personal relationships impact on positive feelings similarly. More precisely one can ask if the qualities of different kinds of relations contribute similarly to create a single, coherent influence on happiness or, if not, what kind of differential role different kinds of personal relations take in this.

Personal relationships are often considered to affect subjective wellbeing as a one-dimensional entity. Indeed, several multiple item measures of subjective wellbeing handle the social or personal relationships domain as a single, general life domain, e.g. ComQol (Cummins, 1997) and the Personal Wellbeing Index (International Wellbeing Group, 2006). A single rating for the entire domain then needs to capture it all. In other instruments however, the social relations domain comprises several facets. For example, the WHOQOL-100 and WHOQOL-BREF (WHO, 2000) consider personal relationships, social support, and sex life as contributing factors to subjective wellbeing. Other researchers have suggested that different sub domains must be taken into account in relation to subjective wellbeing (Chen, et al., 2004 ; Armsden & Greenberg, 1983). Moreover, already the creators of the ComQol stipulated that in certain situations it may be appropriate to use different ratings for friend and family “Intimacy” (McCabe & Cummins, 1998).

In a previous study, three experiments were performed to investigate how levels of satisfaction in different life domains integrate into a single

rating for global subjective wellbeing (Theuns, Hofmans & Verresen, 2007). In that study, life domains were based upon the ComQol (Cummins 1996, 1997) and the social relations domain (referred to as “*Intimacy*”) was split up into three sub domains: *Family Intimacy*, *Acquaintance Intimacy* and *Sexual Intimacy*. It was found that the discerned life domains integrate according to averaging models with differential-weights (Theuns et al., 2007).

In a study adopting a regression approach it was concluded that a linear model does not allow a thorough understanding of the complex relation between general life satisfaction (happiness) and satisfaction in life domain (Rojas, 2006). Other authors too stress the restrictions of a linear model to describe satisfaction in life domains and general life satisfaction (González, Casas & Coenders, 2007). However, adopting an information integration theory approach (e.g. Anderson, 1981, 1982, 1996), the relationship between satisfaction in life domains and overall subjective wellbeing could be investigated more directly (Theuns et al., 2007). The present study focuses on how sub domains within the social relations life domain combine to contribute to happiness.

While growing up, adolescents have been found to decreasingly rely on their parents as attachment figures, and instead increasingly turn to peers and romantic partners for attachment related functions such as comfort seeking in times of stress (Allen & Land, 1999 ; Carlo, Fabes, Laible & Kupanoff, 1999 ; Fraley & Davis, 1997 ; Laible, Carlo & Roesch, 2004). Indeed, it seems that strong relationships exist between the quality of friendship and subjective wellbeing (Argyle, 2001 ; Demir, Ozdemir & Weitekamp, 2007 ; Myers, 2000 ; Van Ijzerdoorn, 2005). The quality of the relation with a partner too seems important for wellbeing in adolescents as in young adults. For example, it was demonstrated that love and satisfaction in romantic relationship constitute very important predictors of happiness, wellbeing, life satisfaction and other positive emotions (Chen, et al., 2004 ; Diener & Lucas, 2000 ; Kamp Dush & D’Amato, 2005 ; Kim & Hatfield, 2004).

Networks of supportive and helpful others thus tend to promote levels of life satisfaction and emotional health (House, Umberson & Landis, 1988). However, the differential contribution of different kinds of relationships to happiness remains unclear. The differential weights averaging models that were found for sub domains of the *Intimacy* life domain among other life domains (Theuns et al., 2007), suggest that satisfaction in one life domain can (partly) compensate for a lack of

satisfaction in some other. The current study investigates if –as for main life domains- differential weights averaging applies to the integration of sub domains of social relations to produce overall happiness.

In addition, when taking belongingness theory into account (Baumeister & Leary, 1995) it can be expected that low *Relation Quality* will have greater impact than normal or high *Relation Quality*. It seems logical that as long as *Relation Quality* is at an intermediate level, the impact of *Relation Quality* on happiness is moderate. However, when something goes really wrong, it can be expected that a life domain will gain obvious preponderance regarding happiness. Hence, it is expected that very low quality of the relations with *Partner (PR)*, *Friends (FR)* and *Parents (PT)* may impact more on overall happiness than normal or high relation quality in the sub domains based model.

Furthermore, as it has been observed that the development of intimate relationships reduces the amount of interaction with other people, even with old friends (Milardo, Jonson & Huston, 1983), it can be expected that romantic bonds, when they are of considerable quality, can satiate people's belongingness needs. Therefore it is expected that in a sub domains based model for happiness the quality of the relationship with a *Partner* will be characterized by stronger weights than the quality of the relationship with *Friends* or *Parents*. A large difference in weights would also substantiate the theoretical notion that quality of the relation with a partner can fully substitute a lack of quality in the relations with friends and/or parents (Baumeister & Leary, 1995).

It can be expected that in adolescence friendships are deemed more important than relations with parents as main attachment focus shifts from their parents to friends (Allen & Land, 1999 ; Carlo, et al., 1999 ; Fraley & Davis, 1997 ; Laible, et al., 2004). However, despite their growing reliance on peers for support, most adolescents continue to rely on their parents (Laible, Carlo & Raffaelli, 2000, Maccoby & Martin, 1983). The question thus remains to what extent peer relations take over. To investigate this hypothesis, the present research was performed on a first year bachelor student (thus mainly adolescent) population.

In summary, it is expected that when studying how people integrate information about relation qualities, averaging models with differential weights will emerge. Moreover it is expected that low relation quality will have a relatively greater impact on happiness than intermediate or high quality. Consequently, higher weights are expected for bad relations than for better. It is also anticipated that a predominant position of the quality of the

relation with a *Partner* with regards to happiness will be found. Furthermore, as the target group in this study comprises mainly adolescents, it is hypothesized that the quality of relations with friends will have a greater impact on happiness than the quality of the relations with parents.

METHOD

In partial fulfillment of the requirements for an introductory course in psychology, first year psychology students participated in different psychological experiments at the university. Of these, 116 undergraduates (87 females, 29 males; mean age 19.10 years ($SD=1.53$)) volunteered to participate in an online experiment on "Happiness" in response to an inviting email. The experiment was developed with the Online Survey Creator (Van Acker, 2009) and run over the Internet.

This vignette experiment was run in a $3 \times 3 \times 3$ full factorial within subjects design including all one and two way sub designs, in which levels of satisfaction in three kinds of relationships (parents, friends, partner) constituted the factors. For each factor there were 3 levels: short sentences describing actual levels of satisfaction in that particular kind of relationship. Each combination of stimuli was presented twice. Participants were required to rate their imagined overall happiness on an 11-points response scale (-5 = "very unhappy" to +5 = "very happy"). In each consecutive stimulus screen (see Figure 1) either one, two or three sentences were shown, each of which described some specific level of satisfaction in a particular kind of relationship.

I can't speak well with my parents.

My best friends make a lot of time for me.

I love my partner and our relation has both good and bad moments.

-5 -4 -3 -2 -1 0 1 2 3 4 5

○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Next

Figure 1: Cut-out sample of a stimulus screen (translated from Dutch) showing 3 sentences describing relationship with Parents, Friends and Partner. In an introductory screen the response scale was explained (5 = "very unhappy" to +5 = "very happy") and participants were instructed to imagine the statements would apply to them and rate how they would feel in that situation.

Out of the 116 volunteering participants, 103 were included for the data-analysis. Excluded were participants with outlier values (exceeding 3 SDs off the mean) for either completion time or for over 10% of the responses.

The data analysis was performed with SPSS 17.0. Moreover, the R.2.8. 1 – R average package (Vidotto & Vicentini, 2007) was used to estimate the scale values and contribution weights of the quality levels of the three personal relations sub domains.

RESULTS

In the factorial plots (see Figure 2) in each panel, the 9 data points on solid lines represent ratings for combinations of two relationship quality factors. White bullets on double lines represent average ratings when a single relationship quality factor is presented (uncombined condition). The 9 data points on dashed lines in the factorial plots represent mean happiness ratings for combinations of all three relationship quality factors, averaged over the 3 levels of the third factor (referred to with "FRav", "PTav" and "PRav" in the plots). Both dashed and solid lines in all three panels of Figure 2 are well spread and show strong patterns of parallelism, indicating

clear main effects for the quality of the relations with a *Partner*, *Friends* and *Parents*. These observations are confirmed by the corresponding ANOVAs (See Table 1). In all three panels of Figure 2 the double line with white bullets (uncombined condition) crosses the midmost solid line (2 factors presented). Together with the parallelism in the solid lines this cross-over indicates that the integration of information on two relationship qualities follows an averaging model.

When considering the integration of information on 3 relationship qualities presented simultaneously, the factorial graphs must be read slightly differently. If the integration of a third factor with 2 other is additive, then it should be expected that the dashed lines in Figure 2 would be parallel, but offset from the solid lines. In case of averaging, however, it seems that 2 patterns can result. Either the dashed lines (3 factors presented, results averaged over the third factor) have a lesser slope than the solid lines (2 factors presented), which results from the third factor that reduces the effect of the first factor (on the ordinate), as in the right panel of Figure 2. Or, the dashed lines are surrounded by solid lines, that is, on average, the third factor reduces the effect of the second factor (as in the left and midmost panel of Figure 2). It seems that averaging can in general explain how information on 3 relationship qualities was integrated.

Although overall parallelism in both solid and dashed lines separately is predominant in all three panels of Figure 2, significant interactions were found in the *Partner* \times *Friends* and *Friends* \times *Parents* designs (see Table 1, solid lines in Figure 2). However, in the full *Partner* \times *Friends* \times *Parents* model only the interaction *Partner* \times *Friends* is significant.

Table 1: Summary of the effects and respective power for the 3×3×3 design and the 3×3 (the third factor=null) ANOVA's for the *Partner* × *Friends* × *Parents*, *Partner* × *Parents*, *Partner* × *Friends* and *Friends* × *Parents* Relation Quality combinations.

Effects of Relation Qualities in PR × FR × PT ANOVA					
Source	DF	<i>F</i>	<i>p</i>	Partial Eta ²	Observed power
PR (<i>Partner</i>)	(2, 101)	153.65	< .001	.75	1.00
FR (<i>Friends</i>)	(2, 101),	167.49	< .001	.77	1.00
PT (<i>Parents</i>)	(2, 101),	94.27	< .001	.65	1.00
PR×FR	(4,99)	7.27	< .001	.23	1.00
PR×PT	(4,99)	.61	.66	.02	.20
FR×PT	(4,99)	.97	.43	.04	.30
PR×FR×PT	(8,95)	1.27	.27	.10	.56

Effects of Relation Qualities in PR × PT ANOVA					
Source	DF	<i>F</i>	<i>p</i>	Partial Eta ²	Observed power
PR	(2, 101)	198.59	< .001	.80	1.00
PT	(2, 101)	104.60	< .001	.67	1.00
PR × PT	(4,99)	.83	.51	.03	.26

Effects of Relation Qualities in PR × FR ANOVA					
Source	DF	<i>F</i>	<i>p</i>	Partial Eta ²	Observed power
PR	(2, 101)	172.86	< .001	.77	1.00
FR	(2, 101)	146.63	< .001	.74	1.00
PR×FR	(4,99)	3.65	.01	.13	.86

Effects of Relation Qualities in FR × PT ANOVA					
Source	DF	<i>F</i>	<i>p</i>	Partial Eta ²	Observed power
FR	(2, 101)	189.09	< .001	.79	1.00
PT	(2, 101)	148.92	< .001	.75	1.00
FR×PT	(4,99)	3.16	.02	.11	.81

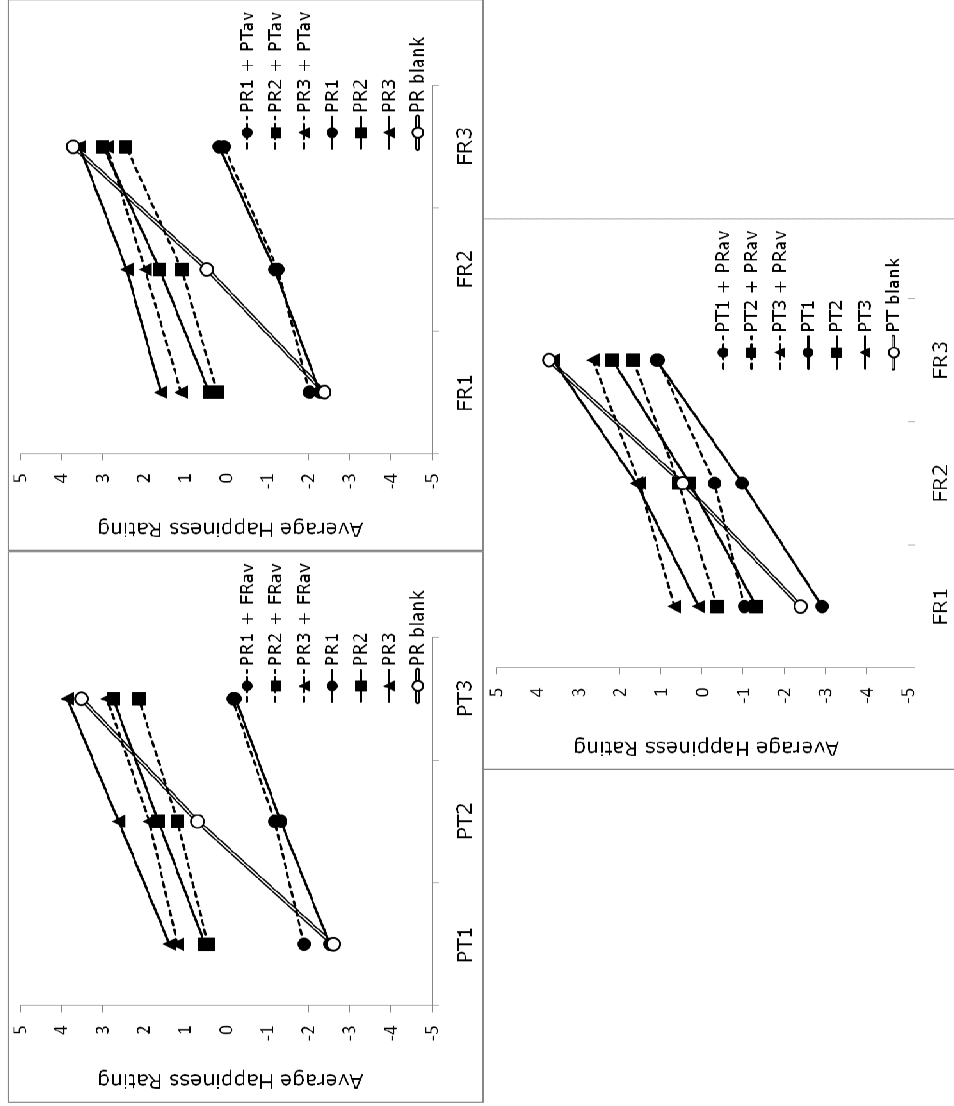


Figure 2: Factorial plots of mean happiness ratings in conditions determined by particular combinations of relation quality in 3 kinds of personal relations domains. White bullets (O) on double lines represent mean ratings when only information on the domain in the ordinate is presented. A black bullet (●) denotes low quality in that kind of relation, a square (■) corresponds to medium quality, and a triangle (▲) stands for high quality in that domain. Sub domains of personal relations are labelled PT = relation with *Parents*, PR = relation with *Partner*, and FR = relation with *Friends*. Solid lines represent average ratings in case only information about 2 domains of personal relations is provided. Dashed lines represent average ratings observed for stimulus screens with 3 non-empty sentences describing levels of satisfaction in the relations with *Partner*, *Friends* and *Parents*, averaged over the 3rd level of the domain (denoted with FRav, PTav or PRav).

Quality of personal relations with *Parents* and *Partner*

Average ratings obtained for combinations of the *Parents* and the *Partner* relations domains are presented in Figure 2 (Left panel). When information on both *Parents* and *Partner* is presented (solid lines), then a clear pattern of parallelism is found in the factorial plot. However, in the plot that is obtained when only information on the *Parents* factor is presented in absence of other information (double line with white bullets) a crossover is observed, which indicates that information on *Parents* and *Partner* is integrated by averaging. Moreover, in case combinations of the quality of personal relations with *Parents* and *Partner* were presented together with information on the quality of personal relations with *Friends* (dashed lines), the factorial plots are again characterized by parallelism. Ratings in absence of information about the third factor (solid) are both steeper and more spread than those where information about the third factor is present (dashed), which illustrates the dampening effect of the third factor (*Friends*). It occurs that the information integration process is averaging, which is supported by significant main effects of both *Parents* and *Partner* and absence of a significant interaction effect in the ANOVAs of the *Parents* × *Partner* sub design, both when combined with information for the *Friends* factor ($F(4,99)=0.61$, $p=.66$) and without that information ($F(4,99)=0.83$, $p=.51$).

Quality of personal relations with *Friends* and *Partner*

For the *Friends* × *Partner* combinations a somewhat different picture shows in the midmost panel of Figure 2. Although the plot, again, indicates averaging, there are a few deviations from the expected pattern. When information about *Friends* and *Partner* is presented without information on *Parents* (solid lines in Figure 2) a clear deviation from parallelism can be observed in the upper solid line left (FR1,PR3), where the average happiness rating is relatively high compared to the other data points. Bad quality in friendship relations, on average, seemingly has relatively little impact on happiness when the quality of the relation with a partner is very good. The ANOVA confirms the observation that the lines in the factorial plot for the *Friends* × *Partner* condition are not parallel ($F(4,99)=3.65$, $p=.01$).

In case information on *Friends* and *Partner* is provided together with information on *Parents* (dashed lines in Figure 2, mid panel) too, a single, but clear deviation from parallelism is observed, now in the right part of the upper dashed line in point (FR3,PR3+PTav). The 3×3×3 ANOVA confirms a significant interaction effect ($F(4,99)=7.27$, $p<.001$). It seems as if some satiation point in happiness is attained, that is, a shift from average to high quality in both relations with *Friends* and *Partner* seems to have a lesser effect when either of both already is of high quality than in case the other is of less than high quality. Although significant, it must be noted that this

effect is relatively small. Apparently, high quality in the personal relation with both *Partner* and *Friends*, when presented in combination with information on the relation with *Parents*, on average, yields a lower happiness rating than one could expect from the general configuration of the curves elsewhere in the plot.

These findings would support averaging with differential weights. However, it must be noted that the effect sizes of the interactions are relatively small when compared to the main effects which are about 3 times larger. In the *Friends* \times *Partner* condition, partial eta squared equals .13. In the combined condition (*Friends* \times *Partner* \times *Parents*), partial eta squared is .23. Still it seems interesting to consider the meanings of these.

Quality of personal relations with *Friends* and *Parents*

The factorial plot for combinations of information about the relation with *Friends* and *Parents* reveals a pattern that is expected for averaging information integration models: parallelism in the solid lines (combined factors) and a cross-over with the double line with white bullets (uncombined factor *Friends*, see Figure 2, right panel). In this plot however, some departure from parallelism is remarked as the dashed nor the solid lines are perfectly parallel. When information on *Friends* and *Parents* is presented combined with information on the *Partner* (dashed lines) the average happiness rating for (FR1,PT1 + PRav) seems relatively high in comparison with the other data points. However, this observation is not supported by the ANOVA which suggests an averaging model with equal weights (absence of significant interaction is verified by $F(4,99)=.97$, $p=.43$ in the $3 \times 3 \times 3$ ANOVA), in the *Friends* \times *Parents* condition a significant interaction ($F(4,99)=3.16$, $p=.02$) is observed. However, it is worth considering the effect sizes, which equals .11 in the *Friends* \times *Parents* condition. In the combined condition (*Friends* \times *Parents* \times *Partner*), the *Friends* \times *Parents* interaction is no longer significant ($F(4,99)=.97$, $p=.43$). For the main effects, the partial eta squares are at least some 7 times larger than for the interaction, which indicates that the importance of the observed interaction effect in the *Friends* \times *Parents* condition is rather marginal.

Scale Values and Weight Estimations

As an averaging model seems appropriate, the *R-Average* package by Vidotto & Vicentini (2007) was used to estimate the scale values and factor weights. This analysis supports an averaging model with equal weights (Table 2). The iterative process results in an adjusted *R-square* of .95 which indicates a good fit of the model. As predicted by the averaging model with equal weights, and as can be seen in Table 2, the weights for quality of relation with the *Partner* are constant over the different levels of this factor

(for *Partner* Relation Quality $w_1=w_2=w_3=6.68$). Similarly, equal weights for all levels of the factors are found for *Friends* Relation Quality ($w_1=w_2=w_3=4.48$) and for *Parents* Relation Quality ($w_1=w_2=w_3=3.47$).

Table 2: Functional scale and weights values. The scale value for stimulus i is denoted by S_i , the corresponding weight is denoted by w_i (where $i = 1, 2$ or 3 respectively for low, medium and high quality of the relations in the personal relations sub domain).

Initial State	Scale Values			Weights		
$S_0: 0.00, w_0: 0.19$						
Factors	S_1	S_2	S_3	w_1	w_2	w_3
<i>Partner Relation Quality</i>	-2.39	2.55	4.01	6.68	6.68	6.68
<i>Friends Relation Quality</i>	-2.64	0.29	4.00	4.48	4.48	4.48
<i>Parents Relation Quality</i>	-2.90	0.42	4.00	3.47	3.47	3.47

AIC=6627.920 ; BIC=6722.745 ; adjR²=0.9474 ; RSS=17942.854 ; pars=14

Chi-Square Test = 2923.832 (DF = 6220) $p = n.s.$

As weights estimated by *R*-Average can be interpreted as ratio-scale estimates (Vidotto & Vicentini, 2007), it seems interesting to consider the ratios of these weights to assess the relative importance of the domains of social relations with respect to global happiness (see Table 3). The ratios in Table 3 are computed by dividing the larger of 2 weights by the smaller, resulting in ratios not lower than one, with ratios close to one indicating similar importance of the corresponding sub domains of personal relations.

Table 3: Factor weights ratios, where w_{PT} , w_{PR} and w_{FR} denote the weights for the quality of the relation with *Parents* (PT), *Partner* (PR) and *Friends* (FR) respectively.

Factor weight ratios	
w_{PR} / w_{PT}	1.93
w_{PR} / w_{FR}	1.49
w_{FR} / w_{PT}	1.29

Apparently, the highest weight in the model (*Partner*) is little less than twice the size of the lowest weight (*Parents*), indicating that the three kinds of personal relations that are considered in this study have markedly different importance. Hence, it seems interesting to further interpret the differential role played by the considered sub domains of social relations relative to happiness.

DISCUSSION

The results of the present study indicate that the integration of information about the quality of personal relations with a *Partner*, *Friends*, and *Parents* occurs according to an averaging model. Despite some significant interaction effects in some ANOVA's, which can most likely be explained by the high power in the design, it seems that equal weights averaging applies. This finding is supported by the prevailing pattern of parallelism in all factorial plots and the weight estimates calculated with *R*-average (Vidotto & Vicentini's, 2007). This finding is in line with the belongingness literature (e.g. Baumeister & Leary, 1995 ; Demir, Ozdemir & Weitekamp's, 2007) which indicates that relationships may be interchangeable so that "good" relationships can protect people against the negative effects of relationships of a lesser quality, or "bad" relationships can trouble good ones. However, previous studies which included more different life domains and which did not –contrary to the present study– concentrate on the relationships life domain only, resulted in differential weights averaging models (Theuns, Hofmans, Verresen, 2007).

Our present findings seem to support equal weights averaging for all levels of qualities of personal relations. So it seems that, counter to what was expected, the relative importance of the quality of the relations with *Partner*, *Friends* and *Parents* remains constant across all quality levels. So, it seems that the quality of social relations contributes to happiness with the same weight that depends only on the kind of relation and not on its quality level. Or, the relative importance of social relations for happiness remains the same, independent of whether that relation is good or bad. As the quality of the relationship with a partner has a weight that is about twice that of the parents, the impact of problematic or very good partner relations seems much larger than that of parents. This finding indicates that the quality of the relationship with parents is clearly less important when compared with friends and partner. Consequently these results suggest that the quality of the relation with parents impacts less than the quality of the relationships with friends and a partner.

When investigating the model more thoroughly, the factor weights ratios indicate that partner relations, impact most on imagined happiness. This finding, together with the fact that information integration seems to occur according to an averaging model indicates that good partner relations can compensate considerably for bad relations with parents or friends. It thus seems that belongingness satiation and substitution (Baumeister & Leary, 1995 ; Demir et al., 2007 ; Milardo et al., 1983) can occur with partner relations for perceived imagined happiness. However, the reverse situation does not present itself fully. Good relations with parents and/or friends can compensate less easily for bad partner relationships. Hence, our

results support the premise that not all relationships are equally interchangeable (Baumeister & Leary, 1995).

A possible explanation may be that the relation with a partner can offer a variety of satisfactions that cannot easily be obtained through nonromantic friendships or child-parent relationships. Furthermore, most adolescents are in a life phase where establishing and maintaining a good, long term romantic relationship is regarded as highly important for happiness and the further development of their lives.

These results partially support the thesis that, in young adults, attachment to parents is replaced by attachment to partners and peers (Allen & Land, 1999 ; Carlo, et al., 1999 ; Laible, Carlo & Roesch, 2004 ; Fraley & Davis, 1997). However, the significant main effect of *Parents Relation Quality* does indicate that parents remain important in the life of undergrads (Laible, Carlo & Raffaelli, 2000, Maccoby & Martin, 1983). Additionally, the lower ratio of the *Friends* to *Parents Relation Quality* substantiates this observation. Furthermore, the ceiling effect observed in the midmost panel of Figure 2 corresponding with (FR3,PR3) can probably be understood as a lack of additional improvement of imagined happiness once the belongingness need is fulfilled. Hence the theoretical notion of “belongingness satiation” seems to apply when combining good relations with both *Friends* and *Partner* (Baumeister & Leary, 1995).

It must be noted however, that these interpretations need further research. A weakness of the present study is that no pre-experimental calibration of the factor level scale values was performed. Hence, it may be possible that a considerable part of the difference in weights for the considered social relations domains can be explained by the difference in stimulus strengths. However, it must be noted that the R average analysis showed that the scale values for the stimuli in the three considered domains covered similar spans in the happiness scale. Moreover, only for the medium level of *Partner Relation Quality* (see Table 2) the scale value deviated strongly from the values for the same level in other factors. Another note of caution is necessary concerning the appropriateness of equal weights for *Parents*, *Friends* and *Partner*. It needs to be stressed that the estimation procedure implemented in the R-average procedure is such that averaging models with equal weights are maintained unless their fit is too poor (Vidotto & Vincentini, 2007).

Also, the present results cannot be generalized far beyond the studied sample of Belgian first year Bachelor students in psychology that were included in this study. It would be interesting to study a broader population. One can think about different adolescent groups such as students from different countries and/or studies, working adolescents, adolescents on welfare, and so on. Moreover, it would be interesting to study a group of adolescents who have children. For this latter group, one could investigate the reverse direction of the child-parent relation in regards to happiness. For older groups, this seems even more intriguing. Perhaps, the observed

“partial refocusing of attachment functions” manifests itself in both ways and reduces the importance that parents lay upon the relations with their children partially. Indeed, it has been shown that if a woman has only one other person in her family, she will be happier if this person is a husband rather than a child (eg. Anderson, Russell & Schumm, 1983 ; Bernard, 1982 ; Campbell, 1981). Finally, it would be interesting to replicate this experiment with other than adolescent groups, like in a senior (parent) population. Probably the relative importance of relations with *Parents*, *Friends* and *Partner* may be different there.

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