original article

When is happy also prosocial? The relationship between happiness and social orientation depends on trust, agency and communion

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BACKGROUND

A number of studies show that being happy is linked to many benefits for the subject. Can it also be associated with prosocial behaviour? Several studies confirm the existence of the *glow of goodwill*, but this effect is mainly a result of experimentally induced positive emotions. We aimed to investigate whether various forms of well-being are linked with social value orientations and to what extent it depends on individual differences regarding trust, agency and communion.

PARTICIPANTS AND PROCEDURE

A total of 284 students (56% women) participated in the study. First, their social orientation was assessed. Then, they completed the following measures: the Subjective Happiness Scale, the Psychological Well-being Scale, the Generalized Trust Scale and the Agency-Communion Scale.

RESULTS

The results revealed that the association between happiness and prosocial orientation was significant and positive, but only in the case of high trust and when agency and communion were controlled for. When psychological well-being was applied as a predictor, high trusters were more prosocial and low trusters were more selfish, irrespective of their levels of agency and communion.

CONCLUSIONS

Our study indicates that the relationship between social orientation and various expressions of wellbeing (such as happiness and psychological wellbeing) is complex and that it should be analysed with reference to the level of trust.

KEY WORDS

happiness; psychological well-being; social orientation; trust; agency; communion

BACKGROUND

Every day, people experience a wide variety of interdependent situations with others. For example, two employees work for the same department of the company and one finds a particularly valuable course that could help in the advancement of his career. Will he share that information with his colleague and by doing so increase the chance that both of them gain unique skills or will he keep that information to himself? This is an example of a social dilemma – a situation in which a subject has to choose a solution concerning either a short-term self-interest or a long-term collective interest (Pletzer et al., 2018). The choices made by decision makers are called social value orientations (SVOs) and reflect the magnitude of concern that one has for others' welfare (Murphy, Ackermann, & Handgraaf, 2011). The decisions can vary from *proself orientations* (including competitors who maximize the relative difference between their own and others' outcomes and individualists who maximize their own outcomes, regardless of others') to *prosocial orientation* (including prosocials who equalize and/or maximize joint outcomes and altruists who maximize others' outcomes). A number of studies have shown that SVO is linked to cooperation and prosocial behaviour both in experimental and real-life situations (for a review, see Pletzer et al., 2018). However, so far less attention has been devoted to investigating individual differences related to particular orientations. To what extent is SVO associated with the level of subjective happiness? How is orientation linked to trust and to different patterns of social information processing? In the present study, we aim to answer these questions.

Happiness is often defined as an indicator of subjective well-being, which has two dimensions – emotional and cognitive (Diener, Suh, Lucas, & Smith, 1999). The emotional dimension is usually described as an affective balance – a dominance of positive emotions over negative ones – whereas the cognitive dimension refers to the quality of different aspects of life judged by an individual to be good (Veenhoven, 1999). Being happy is related to many benefits in everyday life. Several studies have shown that it is associated with such positive outcomes as higher achievements, better health, longer and more satisfying relationships, more resilience to adversity, and deriving more satisfaction from day-to-day experiences (Lyubomirsky, King, & Diener, 2005). A question arises about how this state is related to interpersonal behaviours. Can happiness also be associated with socially valued behavioural intentions such as prosocial orientation? Under what conditions? These questions seem to be important, especially in light of the data (Jasielska, Stolarski, & Bilewicz, 2018) showing that national happiness is not only about being individualistic but is also determined by positive attitudes towards others (expressed in low levels of in-group favouritism and group-focused enmity).

Several concepts suggest possible mechanisms of how happiness induces prosocial intentions. According to the broaden-and-build theory (Fredrickson, 2001), positive emotions (which are a hallmark of happiness; Diener et al., 1999) evolved to prepare individuals to seek new experiences, so their function is to produce the tendency to approach rather than to avoid. As a result, they lead to positive evaluations of other people and promote others-oriented activities that could allow for resource building. By being kind, being generous or helping others, one builds or strengthens social connections, which can be valuable in the future. In another model, proposed by Lyubomirsky et al. (2005), happiness (defined as a long-term propensity to experience positive emotions) is a signal that the ego is not threatened so the subject can seek new goals and a new focus, not only for securing their own well-being, but also for others' needs. This implies that when there is a possibility of benefiting others, happy people would be likely to embark on actions that do so. These theoretical frameworks seem to be confirmed by results of experimental studies, which show the existence of the *glow of goodwill* effect (Batson, Coke, Chard, Smith, & Taliaferro, 1979), in which inducing positive affect leads to more helping (Isen & Levin, 1972). However, it is important to note that expressing concern for others is not always the result of a positive emotional state (Batson & Powell, 2003). It might be an effect of a positive attitude towards others rather than happiness. The decision to benefit a stranger may arise from trust – a general expectation of positive rather than negative outcomes of the behaviour of others (Ashraf, Bohnet, & Piankov, 2006; Johnson & Mislin, 2011; Yamagishi & Yamagishi, 1994). Both trust and prosocial orientation stem from a belief about other's benevolent motive toward oneself (Balliet & Van Lange, 2013). Some authors even claim that measuring SVO can be considered an operationalization of trust because it addresses expectations of others' behaviour in social dilemmas (Pletzer et al., 2018). If a subject believes that people are trustworthy, he or she will be more likely to express prosocial orientation because of the expectation that this kind behaviour will be rewarded by reciprocity (Chaudhuri, Sopher, & Strand, 2002; Johnson & Mislin, 2011). Studies also show that, in general, happy people (and nations) are also more trustful (Growiec & Growiec, 2014; Jasielska, 2018; Jasielska, Rogoza, Zajenkowska, & Bower-Russa, 2019; Tov & Diener, 2008). Hence, trust seems to be an important factor to consider when analysing relationships between happiness and prosocial orientation.

Some studies have shown that happiness can be linked to many positive outcomes in various domains of life (Lyubomirsky et al., 2005). Also, people

are more likely to help and think favourably of others (Batson et al., 1979) when they experience positive emotions. We wanted to examine whether this relationship also applies to individuals with a happy disposition. Understanding how these variables are connected seem to be an important undertaking as it can shed some light on everyday patterns of interpersonal behaviour. Theoretical frameworks indicate that happy individuals should be more other-oriented because, being free from immediate danger, they do not have to focus on securing their own well-being (Lyubomirsky et al., 2005). Instead, they can pay attention to strengthening social bonds, which is a way of building resources for the future (Fredrickson, 2001). However, we expected that the relationship between these two variables would be complex and depend on several factors. To show concern for others, happy people need to believe that others are honest, trustworthy and generally good-natured. Thus, in this study, we predicted that (1) the level of happiness is linked to a prosocial orientation, but (2) this relationship would be stronger in people with high trust.

Moreover, it should be easier to think about benefiting others for a person who is inclined to perceive social situations from the perspective of other people and express consideration for others. Thus, the social information processing dimensions communion and agency (Abele & Wojciszke, 2007) were included in our model. Communion involves caring about others and strengthening social bonds and should therefore be positively associated with SVOs which reflect a magnitude of concern for others' welfare (Murphy et al., 2011). However, people with high levels of agency process social information from the perspective of self, so they should be more likely to express a proself orientation aimed at maximizing their gains rather than thinking about benefiting others. Also, both dimensions might be related to higher well-being (Abele, 2014). Hence, we predicted that agency will be negatively and communion will be positively related to SVO.

In the present study, aside from happiness, we measured the level of psychological well-being (PWB). Contrary to happiness and subjective well-being, which focus mainly on hedonic aspects of well-being (Diener, 1984), this construct refers to eudaimonic well-being, defined as the fulfilment of human potential and a meaningful life (Ryff, 1989). PWB does not relate to dominance of positive emotions or moods in life. Instead, it is focused on growth and development that can be achieved by accomplishing meaningful goals, building positive relations with others or focusing on personal development. Whether happiness and PWB present two approaches to measuring the same construct or two distinguishable constructs is the subject of debates and empirical analyses (Chen, Jing, Hayes, & Lee, 2013). However, measuring both of them is often recommended, as it

allows for controlling the extent to which they share a common variance and how they differ in predicting other variables (Biswas-Diener, Kashdan, & King, 2009; Chen et al., 2013). If happiness and PWB are convergent, then they would produce similar patterns of results. Otherwise, the observed differences may lead to some interesting conclusions that could enhance the general understanding of the results.

To the best of our knowledge, none of the previous studies have tested the links between various expressions of happiness and SVO depending on trust, agency and communion. The present study aims to fill this gap and hence provide some clarification about how these variables are interrelated.

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

Participants were 284 students (56% women) aged 18-46 years (M = 22.42, SD = 4.92) from three universities in Poland (humanistic, economic and technical departments). A priori power estimation assuming low effect size (r = .20, two-tail) indicated that 191 participants were needed (power = .80, α = .05) in case of bivariate correlations. However, because our analyses were more complex and included interaction effect as well as multiple predictors, we enrolled more participants in the study. The students were recruited on university campuses by research assistant (a psychology student, who was previously trained in conducting research).

MEASURES

Social value orientation. We used the social value orientation (SVO) slider measure (Murphy et al., 2011) to assess the magnitude of concern for others. The instrument has six items for which the participant needs to decide about the allocation of money between her and another person, choosing one from the available options. The decision maker (DM) marks the most preferred location on the slider. For example, in item 4, there are the following options of distribution on the slider:
- You $50, Other $100;
- You $54, Other $89;
- You $59, Other $79;
- You $63, Other $68;
- You $68, Other $58;
- You $72, Other $47;
- You $76, Other $36;
- You $81, Other $26;
- You $85, Other $15.

Additionally, to the right of the item, the participant writes down the corresponding payoffs result-

ing from her choice (this step, according to the authors, serves to verify whether the DM understood the choice task and the resulting allocations). Based on the mean allocations for self and other, the inverse tangent of the ratio between these means is computed, resulting in a single index of a person's SVO. Depending on the choices the participant makes, the results will reflect competitiveness (an angle less than 12.04°), individualism (angles between 12.04° and 22.45°), prosociality (angles between 22.45° and 57.15°) or altruism (an angle greater than 57.15°). Answers can also be coded on a continuous scale from competitiveness (maximum proself) to altruism (maximum prosocial). As previous studies have shown (Murphy et al., 2011; Pletzer et al., 2018), the instrument has a very good convergent and predictive validity and test-retest reliability. Prior to use, the scale was translated into Polish and then back translated by a bilingual person.

Happiness. As an indicator of happiness, we used the Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, 1999). Participants answered four questions relating to subjective feelings about their own happiness (such as "In general, I consider myself..." 1 – *not a very happy person* to 7 – *a very happy person*). Participants can obtain from 4 to 28 points. For statistical analyses we used mean results. Prior to use, the scale was translated into Polish and then back translated by a bilingual person. The reliability of the scale was good; McDonalds's ω = .78.

Psychological well-being. The Psychological Well-being Scale (Ryff & Keyes, 1995; Polish adaptation by Karaś & Cieciuch, 2017) was used as an indicator of PWB. The scale is based on a eudaimonic understanding of happiness. It measures six aspects determining psychological quality of life: positive relations with others (the possession of quality relations with others), autonomy (a sense of self-determination), personal growth (a sense of continued growth and development as a person), environmental mastery (the capacity to manage effectively one's life and surrounding world), self-acceptance (positive evaluations of oneself and one's past life), and purpose in life (the belief that one's life is purposeful and meaningful). Participants responded to 18 statements (such as "In general, I feel I am in charge of the situation in which I live"), indicating the extent to which they agreed with each of them on a 5-point scale. Total scoring ranged from 18 to 90 points. For statistical analyses we used mean results. The reliability of the scale was good; McDonald's ω = .74.

Trust. The Generalized Trust Scale (GTS; Yamagishi & Yamagishi, 1994) was used to measure trust, defined as an expectation of trustworthiness of others. It consists of six items, such as "Most people are trustworthy". Participants responded using a 5-point scale. Total scoring ranged from 5 to 30 points. For statistical analyses we used mean results. Prior to use, the scale was translated into Polish and then back translated by a bilingual person. The reliability of the scale was good; McDonalds's ω = .73.

Agency-communion. The Agency-Communion Scale (ACS; Wojciszke & Szlendak, 2010) was used to assess agency, defined as focus on the self and personal goals, and communion, defined as focus on others and interpersonal relations. It consists of 30 adjectives referring to these two dimensions (for example "effective" or "caring"). Participants rated the extent to which each word described them using a 7-point scale. Total scoring ranges from 15 to 105 for each scale. For statistical analyses we used mean results. The reliability of the Agency scale was very good; McDonald's ω = .87. The reliability of the Communion scale was also very good; McDonald's ω = .88.

PROCEDURE

After obtaining informed consent from them, all participants were presented with measures. First, their SVO was assessed. Then, they completed other questionnaires in the following order: Subjective Happiness Scale, Psychological Well-being Scale, Generalized Trust Scale and Agency-Communion Scale. We used two more measures (one to assess universalistic vs. particularistic approach in moral dilemmas and another, to assess how much good vs. bad other people had done to participant), but they weren't included in analyses. All participants were informed of the purpose and anonymity of the study. Participation was voluntary with no incentives provided. All procedures performed in the study were in accordance with the ethical standards of the institutional research committee and with the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards.

RESULTS

Table 1 presents descriptive statistics, Cronbach's α reliability and zero-order Pearson correlations between study variables. All scales indicated satisfactory to very good reliability; however, one item ("Generally, I trust others") was not included in the trust index as it negatively affected the reliability of the scale. The SVO was not related to happiness or PWB, but highest trust was associated more with prosocial SVO, whereas higher agency correlated with less prosocial SVO. Communion was positively, but very weakly, related to SVO (p = .074). Also, the happier people were, the more trust, communion and agency they reported. The same was true for PWB. Additionally, sex (women coded 1, men coded 2) was not related to SVO but was associated with PWB (r = .13, p = .027), communion (r = −.21, p < .001), and agency (r = .15, p = .011).

Table 1

Descriptive statistics, Cronbach's α reliability and zero-order Pearson correlations between study variables

Variables	SVO	PWB	Happiness	Trust	Communion	Agency
SVO	–	−.08	−.01	.17**	.11	−.16**
PWB		–	.54***	.09	.26***	.57***
Happiness			–	.30***	.19**	.42***
Trust				–	.20**	.10
Communion					–	.23**
Agency						–
M	2.83	3.83	4.79	2.97	5.43	4.92
SD	0.41	0.39	1.08	0.62	0.68	0.81
α	–	.74	.79	.70	.88	.89

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

Thus, the results of correlation were in line with the predictions, except the lack of relationship between SVO and happiness. This, however, might be due to the conditional effect of trust and agency-communion dimensions. To verify this possibility, we tested the model in which we included happiness as a predictor of SVO and trust as a moderator of this relationship. We also included agency and communion as predictors of SVO and controlled for PWB. A separate model was tested for the PWB x trust interaction, with happiness and agency-communion dimensions as predictors, controlling for happiness. This way we could see whether happiness and PWB are moderated differently by trust predicting SVO or whether the effects might be similar. All analyses were conducted using linear regression with the bootstrapping method with Hayes (2017) PROCESS macro, version 3.1.

The results showed significant interaction effects in the case of both measures: happiness, $\Delta R^2 = .02$, $F(1, 277) = 15.45$, $B = .07$, $SE = .03$, $t = 2.33$, $p = .020$, 95% CI [0.01; 0.13], and PWB, $\Delta R^2 = .05$, $F(1, 277) = 15.96$, $B = .41$, $SE = .10$, $t = 3.99$, $p < .001$, 95% CI [0.20; 0.60]. The simple slope analysis revealed that the relationship between happiness and SVO was significant and positive only in the case of high (+1 SD) trust, $B = .07$, $SE = .03$, $t = 2.01$, $p = .045$, 95% CI [0.00; 0.14], but was not significant for low (−1 SD) trust, $p > .55$. However, the relationship between PWB and SVO was significant for both low trust, $B = −.26$, $SE = .09$, $t = −2.66$, $p = .008$, 95% CI [−0.46; −0.06], and high trust, $B = .23$, $SE = .10$, $t = 2.24$, $p = .026$, 95% CI [0.02; 0.44]. The relationship between PWB and SVO was positive in high trust but negative in low trust, meaning that in low trust higher PWB was related to more selfish choices, but in high trust greater PWB translated to more prosocial orientation. Means for low and high trust (−1/+1 SD) at low and high happiness are presented in Figure 1 and for PWB in Figure 2.

In the case of the happiness model, besides the interactive effect, communion and agency also predicted SVO, which is not surprising given the re-
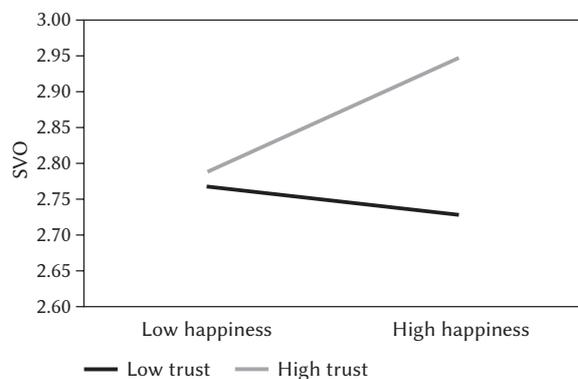

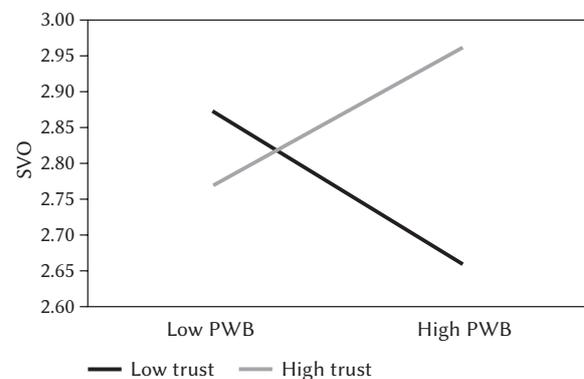*Figure 1.* Mean SVO at low (−1 SD) and high (+1 SD) happiness and trust.

Figure 2. Mean SVO at low (−1 SD) and high (+1 SD) PWB and trust.

sults of zero-order correlations: communion, $B = .07$, $SE = .03$, $t = 2.09$, $p = .037$, 95% CI [0.00; 0.15] and agency, $B = -.11$, $SE = .03$, $t = -3.10$, $p = .002$, 95% CI [−0.18; −0.04]. When communion and agency were not included in the model, the interaction between happiness and trust dropped to $\Delta R^2 = .01$, $F(1, 280) = 3.80$, $B = .06$, $SE = .03$, $t = 1.95$, $p = .052$, 95% CI [−0.00; 0.12]. In the case of the PWB model, both dimensions were, as with happiness, significant predictors of SVO: agency, $B = -.10$, $SE = .03$, $t = -2.80$, $p = .005$, 95% CI [−0.17; −0.03] and communion, $B = .08$, $SE = .03$, $t = 2.36$, $p = .018$, 95% CI [0.01; 0.15]. However, they were less important in the case of the PWB x trust interaction, which remained significant even when no other predictors were included, $\Delta R^2 = .05$, $F(1, 280) = 14.83$, $B = .39$, $SE = .10$, $t = 3.85$, $p < .001$, 95% CI [0.19; 0.59].

DISCUSSION

In the present study, we investigated whether the *glow of goodwill* effect can be observed in individuals with high levels of happiness as a trait, not just in the case of experimental mood induction. We expected that happiness would predict prosocial SVO and that this association would depend on trust controlling for individual differences in social information processing. We also examined whether a similar pattern of results would be observed for PWB – a eudaimonic dimension of well-being considered an alternative to a more hedonic happiness (Ryff, 1989).

Consistent with our predictions, dimensions related to social information processing and attitude towards others played an important role in explaining the link between happiness and prosocial SVO. The association between these two constructs was significant and positive, but only in the case of a high level of trust and when levels of agency and communion were controlled for. This implies that happiness as a trait is not enough to act prosocially and explains why it might not be related to helping when actual behaviour is measured (Jasielska, Prusik, & Rajchert, 2019). In order to express concern for others, one needs to trust people, that is, expect positive outcomes of their behaviour (Yamagishi & Yamagishi, 1994). Then prosocial behaviour can be perceived as a form of social investment, in which performing good deeds would eventually be rewarded with reciprocity (Johnson & Mislin, 2011). Furthermore, prosocial orientation was related to higher levels of communion and lower levels of agency. In other words, subjects who were willing to benefit others in a social dilemma situation were more likely to process social information from the perspective of others and less likely to focus on goal pursuit for the self.

A similar pattern of results was observed for PWB. However, the association between PWB and prosocial SVO was significant for both low and high trust. Participants with high levels of PWB and trust were more likely to focus on benefiting others, whereas those with a high level of PWB but low level of trust made more proself choices. This effect was significant, irrespective of the levels of agency and communion. Apparently, having high PWB does not necessarily lead to expressing more concern for others. In fact, when combined with a belief that it is better not to trust others, it can be linked to more selfish behaviour. This result is consistent with data from a cross-cultural study (Jasielska, Rogoza, Bower-Russa, Park, & Zajenkowska, 2020) indicating that the relationship between interdependent, "communitarian" Self and happiness might depend on the frequency of using a hostile attributional style in response to difficult interpersonal encounters. Apparently, attitude towards other people plays an important role in explaining whether a happy person is also focused on benefitting others or not.

These results lead to some important conclusions regarding the studied attributes. First of all, as expected, trust was linked to prosocial SVO. However, the association between these two constructs was not strong enough to claim that trust would be an operationalization of prosocial SVO (as some authors suggest – see Pletzer et al., 2018). Certainly, they capture a different phenomenon, as trust is related more to a general view about others and their behaviour (Yamagishi & Yamagishi, 1994), whereas SVOs focus on self and personal decisions in a social context (Murphy et al., 2011). Still, the obtained results show that trust is an important factor in explaining the level of SVO; therefore, it should be controlled in future studies where SVOs are involved.

In the study, we used two different indicators of well-being: happiness (hedonic dimension) and PWB (eudaimonic dimension). These constructs were only moderately correlated. There were also some differences in the results obtained for each of them. The interaction between happiness and trust was related to levels of agency and communion when predicting prosocial SVO, whereas the interaction between levels of PWB and trust predicted prosocial SVO irrespective of agency and communion. These results seem to support the earlier finding that happiness and PWB reflect two different roads to achieving the state of well-being, but they also contribute to one general construct (Chen et al., 2013). Hence, in studies that measure well-being, it seems particularly important to control for both hedonic and eudaimonic perspectives as this can explain more variance in the studied phenomenon (Biswas-Diener et al., 2009).

The study has several limitations that should be acknowledged. First of all, our approach was correlational, so we are limited in our ability to determine causal relationships between studied variables. An experimental manipulation of the level of happiness

would provide a greater insight into the relationship between happiness and social orientation. In future studies, it would be beneficial to combine declarative measures of happiness and psychological well-being followed by experimental manipulation and compare data from this research. What is more, to measure social orientation we asked participants to decide about the allocation of money between them and another person, but we did not measure actual behaviour. It has been confirmed that measuring the same construct using declarations and actions can produce different results (even contradictory – see Grzyb, 2016). Therefore, in future studies it would be advisable to measure social orientations expressed in activity. Comparing declarations with behaviour would have great methodological and conceptual value and would allow more profound observations on the matter to be made. The study was also conducted on students from a big city. This is a specific group, so the conclusions cannot be transferred to the whole population. In future, other demographic groups should also be taken into consideration to obtain a more complex picture of the studied variables.

Nevertheless, the present study may shed some light on the relationship between various forms of well-being and prosocial behaviour. Apparently, the link between these constructs and helping others is not so evident as in the case of inducing positive emotions (Batson et al., 1979; Isen & Levin, 1972). Having a high level of well-being is not enough to act prosocially if the subject is not positively inclined towards others and does not believe that they can be trusted. It seems that trust is a necessary ingredient for being more concerned about others, which is consistent with other data showing that trust interacts with kindness in predicting the level of happiness (Jasielska, 2018). Trust is a core element of everyday interactions and is essential for social functioning for individuals, groups and nations (Helliwell, 2006; Putnam, 2000). Our study shows that it should also be taken into consideration when studying social correlates of happiness. What is more, lack of trust can lead to more selfish behaviour. This notion can be supported by the results showing that agency was linked positively to happiness and PWB but negatively to prosocial SVO. This implies that a person with greater agency can have high well-being but at the same time will be focused more on personal gains than caring for others. This is consistent with findings showing that individualistic values are important determinants of happiness (Veenhoven, 1999). Certainly, well-being can be linked to both selfish and prosocial behaviours, and it seems that the distinction between hedonic and eudaimonic perspectives does not explain the differences in this area. Hence, in future studies on well-being, it would be advisable to control for levels of agency and communion as they seem to play an important role in

determining whether or not a happy subject is going to act prosocially.

We conclude that the relationship between social orientation and various expressions of wellbeing (such as happiness and psychological wellbeing) is complex and that it should be analysed with reference to the level of trust, controlling the levels of agency and communion.

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