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Article (Accepted version)
(Refereed)

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Accepted for publication in the *British Journal of Social Psychology**

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Wordcount: 7066 (text body)

Abstract

Does money buy happiness? Or is happiness derived from looking outwards toward our social networks? Many researchers have answered these questions by exploring whether the best predictor of well-being is *either* economic *or* social (or some fixed combination of the two). This paper argues for a dynamic perspective on the capacity for economic and social factors to predict well-being. In two studies we show that both money (individual income) and community (social capital) can be the basis for individual happiness. However, the relative influence of each factor depends on the context within which happiness is considered, and how this shapes the way people define the self. Study 1 primes either money or community in the laboratory and demonstrates that such priming shifts individual values (so that they are economic versus communal) and determines the extent to which income is more (versus less) predictive of life satisfaction than social relations. Study 2 looks at these same priming processes in the external world (with people traveling to versus from work). Both studies show that while money can become the basis of happiness when the self is defined in economic terms, the role of community relations in predicting happiness is more stable across contexts.

Keywords: Life satisfaction; Happiness; Subjective Well-Being; Identity

Unpacking the hedonic paradox: A dynamic analysis of the relationships between financial capital, social capital and life satisfaction

Our hearts will be in a very bad way if they're focused only on the state of our finances. They'll be healthy if they are capable of turning outwards, looking at the real treasure that is our fellow human beings.

Rowan Williams (Archbishop of Canterbury, New Year message, 2008)

What makes people happy?[1] Until recently, most economists and policy-makers subscribed to the view that individual well-being increases as a function of consumption at both individual and aggregate levels (Easterlin, 2005; Pigou, 1932). This idea is based on an assumption that individual needs can be satisfied by carrying out transactions in a free market. Because money is the universal means of exchange within such a market, standard utility theory predicts that increased income should lead to increased utility (Clark, Frijters, & Shields, 2008; Frey, & Stutzer, 2005). Utility models suggest that humans are economic beings and that money is the path to happiness. Indeed, recent analyses show that income can adequately capture variance on certain measures of life satisfaction (e.g., Gallup Global Poll data based on the Cantril ladder; Deaton 2008; Helliwell, Barrington-Leigh, Harris & Huang 2009; Stevenson & Wolfers, 2008). However, other studies suggest that once basic needs are met, additional income does not further enhance happiness (see Ahuvia, 2008; Dolan, Peasgood, & White, 2008; Diener & Biswas-Diener, 2002; Easterlin, 2005; Lane, 2000; Layard, 2005). Thus, there is variability in the degree to which income predicts well-being, highlighting the need to consider predictors other than income. This was the aim of the present paper, which considers the dynamic role played by both economic and non-economic factors — including those that stem from the individual's social environment (Helliwell &

Putnam, 2004), and the psychological processes that guide the individual's assessment of their happiness — in determining individual well-being.

Social determinants of well-being

Reflecting the view that human motivation is oriented towards higher-order needs and goals, psychologists often focus on things other than money as determinants of well-being. Some have argued that happiness is a product of personality traits (e.g., DeNeve & Cooper, 1998) or genetic factors that are believed to predispose individuals toward optimism (i.e., happiness) or pessimism (unhappiness; Weiss, Bates, & Luciano, 2008). From this perspective, happiness literally comes from within and although people may experience temporary fluctuations in well-being, overall levels of well-being are relatively stable (Brickman & Campell, 1971; Heady, 2007).

More recently, this perspective has been challenged by evidence for the dynamic and changeable nature of subjective well-being (Diener, Lucas, & Scollon, 2006; Easterlin, 2005; Headey, 2007; Lucas, Clark, Georgellos, & Diener, 2003). In response to this apparent fluidity, social scientists have stressed importance of social forces (Helliwell, 2008). For example, on the basis of a major review, Baumeister and Leary (1995) argued that the need to belong and to have close social relationships is a fundamental human motivation. Accordingly, the quality of social relations has direct implications for individual health, adjustment and well-being, and events that damage social relations can lead to marked declines in these indicators.

Similarly, self-determination theory argues that satisfaction of psychological needs like autonomy, relatedness, and personal growth form the foundation of well-being (Deci & Ryan, 2008; Ryan & Deci, 2000), with relatedness playing a particularly important role. Relatedness is defined as people's quest for authentic social relationships and their deep-seated desire to be involved with other human beings (Diener & Seligman, 2002, 2004; Sheldon, Elliot, Kim, & Kasser 2001). Such relationships are seen to be a source of intrinsic

motivation, which has the capacity to provide a stronger and truer basis for action (and hence happiness) than the extrinsic motivations associated with consumption of goods and services.

Based on such evidence, Easterlin (2005) concluded that in their pursuit of happiness individuals would be wise to allocate rather more time to their social relations and rather less to economic activity. Nevertheless he and others have noted that many people cling to a belief that income, physical comforts, and material goods will make them happier, and as a result they devote a disproportionate amount of time working to accumulate these things. Easterlin argues that in the process of pursuing the material goods that they believe will make them happy, people often sacrifice family life and other social relations that might actually deliver the outcomes for which they yearn. Effectively, they become trapped on a 'hedonic treadmill' (Easterlin, 1974, 1995; Layard, 2005).

Unpacking the hedonic paradox

Although previous work has focused on different predictors of happiness, it is nevertheless the case that many researchers have assumed that the best predictor of well-being is *either* economic *or* social (or some fixed combination of the two). In part, this arises from a desire to provide definitive, context-independent answers to the question of what makes people happy (e.g., as represented by Stevenson & Wolfers, 2008, and several chapters in Diener, Helliwell & Kahneman, 2010). This type of thinking leads to an apparent *paradox* in which people's pursuit of happiness is often observed to involve enthusiasm for activity that compromises their well-being (Ahuvia, 2008; Kasser, 2002).

Recently, social psychologists have moved away from the question of whether money *per se* predicts happiness to instead focus on the psychological consequences of money. More precisely, research has explored how economic thinking and behaviour (i.e., spending money) affects the self and social relations. For example, Vohs and colleagues have shown how priming the concept of money turns people away from others. As a result, individuals who are reminded of money become more personally self-focused and less socially responsive — both

in terms of their willingness to help others and their openness to receiving others' help in

return (Vohs, Mead, & Goode, 2006, 2008; Zhou, Vohs, & Baumeister, 2009). Along slightly

different lines, Dunn, Aknin and Norton (2008; see also Aknin, Norton, & Dunn, 2009)

showed that spending money on others (rather than oneself) predicts greater happiness. Thus,

if money is used as a pro-social tool it has a positive impact on well-being and fosters social

connectedness. Related research by DeVoe and Pfeffer (2009) shows that organizational

structures can amplify or attenuate economic thinking in ways that have consequence for the

relationship between money and self-rated happiness. Specifically, individuals who are paid

by the hour attach more importance to money as the basis for happiness and display a stronger

connection between income and well-being (DeVoe & Pfeffer 2009).

These lines of research highlight the way in which situations that bring money to the

forefront of people's minds can have consequences for the way in which individuals orient

themselves to others and evaluate their own happiness. This idea is consistent with broader

research on focalism. This perspective suggests that when people form judgments (e.g., about

their happiness) they do not take account of all of the information that might help them reach

an accurate assessment. Instead, they focus on the specific information that is accessible to

them in the judgmental context at hand. In line with this reasoning, individual judgments of

life satisfaction have been found to depend on the information that people have available to

them at the point of assessment (Schwarz & Strack, 1999). For instance, people tend to report

a better mood on sunny rather than rainy days, and consequently also report greater happiness

and life satisfaction when the weather is sunny rather than rainy (i.e., people used their

situational mood as a basis for determining global happiness; Schwarz & Clore, 1983).

It could be argued that one reason why money emerges as a stable predictor of

individual happiness in much research is that the structures of everyday life provide pervasive

reminders of the importance of money. Accordingly, when people are asked about their

happiness, economic issues will often be salient in ways that lead them to overestimate the

contribution of economic concerns to their well-being. However, when judgmental contexts draw people's attention away from money, one could anticipate that the relative importance of money for happiness would subside and be replaced by alternative predictors, such as the quality of people's social relations.

Contrary to the substance of many of the debates that have structured the literature on money and well-being, this perspective suggests that happiness is unlikely to be straightforwardly economic *or* social. Instead, it suggests that both economic and social factors contribute to individual assessments of happiness. Importantly, the relative contribution of each of these is likely to vary according to a perceivers' attentional focus within a given judgmental context (Frey & Oberholzer-Gee, 1997).

The present research

The present research examined the relative contribution of economic and social factors to individuals' assessments of their happiness. Specifically, we test the prediction that happiness can be predicted on the basis of both individual income and the quality of one's social relations. Building on past work on focalism, we suggest that the relative contribution of each of these factors is unlikely to be stable, but rather will vary as a function of the judgmental context. When context focuses people on money, judgments of their happiness should be informed by considerations of their economic circumstances. Conversely, when context focuses people on social relations, the quality of these should become a stronger predictor of well-being. Although previous research has examined contextual variations in the link between income and well-being (e.g., DeVoe & Pfeffer, 2009), to date research has not simultaneously considered the effects of context on both economic and social predictors of happiness. This was the novel contribution of the present research.

By examining both social and economic predictors of well-being, and variation in their predictive power across contexts, we can also explore a range of more complex possibilities about the role of each of these in structuring individual happiness. For example,

drawing on research into social capital (Putnam, 2000) and psychological perspectives which highlight connections to others as a fundamental need or intrinsic motivator (e.g., Baumeister & Leary, 1995; Deci & Ryan, 2008; Jetten, Haslam & Haslam, in press), one might expect that the state of a person's social relations could be a more enduring and less context-dependent predictor of individual happiness than financial considerations (e.g., Diener & Seligman, 2004; Sheldon, et al., 2001). Thus, in addition to testing the role of context in shaping the economic and social predictors of happiness, we also consider the relative contribution of each of these predictors. Our first study explored these issues in a controlled experiment, whereas the second study explored these ideas in a field setting.

Study 1

The aim of Study 1 was to examine the relationship between income and individual happiness as a function of contexts that make particular concepts more or less salient. Specifically, we manipulated the contextual salience of money or community (versus a control condition) in a context where people were asked to make assessments of their happiness. Based on previous theory and research, we expected that the relationship between income and well-being should be particularly strong when money was made salient. Conversely, when alternative concepts, like community, are salient the predictive power of income for well-being should diminish and that of social capital (i.e., the quality of the individual's social relations) should increase.

Method

Participants and design

Participants were 192 adults (80.2% female) aged between 16 and 71 (M_{age}=32.8, SD=14.34). All participants lived in the UK. Participants were recruited via online fora and mailing lists. No remuneration was offered for participation. The study employed a between-subject design with three experimental conditions (income salience, community salience, control) to which participants were randomly assigned. Household income and satisfaction

with family and community relationships were measured before the experimental manipulation. The dependent variable was life satisfaction.

Procedure and measures

The study was presented as research on "the relationship between language ability and life satisfaction". Participants were first asked to answer demographic questions by indicating their age, gender, country of residence, household income per year, and number of people in the household, as well as two questions about satisfaction with family and community relationships. To measure these, participants were asked to rate the extent to which they were satisfied with their family and community relationships on 7-point scales ranging from 1 "very satisfactory" to 7 "very unsatisfactory". The two items were significantly correlated, $r(191)=.53$, $p<.001$ and were therefore averaged to form a single measure of satisfaction with social relationships. An open-ended question was used to measure household income.

On the next page participants were asked to complete "a short task involving language ability and sentence construction". They were then presented with ten scrambled sentences. Their task was to form meaningful sentences using the scrambled words. The set of scrambled sentences that followed consisted of six manipulation sentences (that included either economic, social, or neutral concepts depending on the condition) and four filler sentences (identical across conditions; see Bargh, Chen, & Burrows, 1996, for a description of this priming procedure). In the *money salience* condition the sentences included words related to money and highlighted its general importance (e.g. "Lack of money is the root of all evil", "There are few sorrows in which a good income is of no avail"); in the *community salience* condition the sentences included words related to family and friendship and highlighted the importance of community (e.g. "It takes a long time to grow an old friend", "Friends are relatives you make for yourself"). In the *control* condition, sentences unrelated to money or community were used (e.g. "Common sense is not so common"). To ensure participants

correctly understood the task, they were given an illustrative sentence with a solution
(identical across all conditions) before commencing the task.

On the next page participants completed a manipulation check. This was presented as
another language ability task and consisted of eight word stems that participants were asked to
complete so that each stem became a full word. The stems were selected such that some of
them could be completed with money-related words (e.g. wea(lth), ca(sh)), and some with
community-related words (e.g. fr(iend), fa(mily)). Participants were asked to complete each
stem with the first word that came to their mind. For each participant we calculated the
number of money-related and community-related words that were used to complete the stems.

Finally, participants completed a life satisfaction scale. This consisted of the five items
(α=.88) from the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen & Griffin,
1985). Participants responded to the items on 7-point scale from "strongly disagree" to
"strongly agree".

Results

Manipulation check

A mixed ANOVA was conducted with experimental condition as a between-subject
factor and the number of money-related and community related words as the repeated factor.
There was a significant effect of experimental condition: $F(1,189)=108.25$, $p<.001$, $\eta^2_p=.36$.
However, this main effect was qualified by a significant interaction between condition and the
type of words, $F(2,188)=11.03$, $p<.001$, $\eta^2_p=.10$. Planned contrasts revealed that participants
in the money salience condition used more money-related words to complete stems
($M_{money}=1.08$, $SD=0.90$) than participants in the other two conditions ($M_{community}=0.47$,
$SD=0.68$; $M_{control}=0.42$, $SD=0.62$), $t(188)=5.72$, $p < .001$. Conversely, participants in the
community-salience condition used more community-related words ($M=2.32$, $SD=1.36$) than
participants in the other two conditions ($M_{money}=1.67$, $SD=1.34$; $M_{control}=1.48$, $SD=1.37$),

$t(188)=3.51$, $p=.001$. On this basis we conclude that our priming of money versus community was effective.

Main analysis

Prior to the analysis, all variables were checked for outliers and missing values. Forty cases were excluded because they contained missing values for income. These were equally distributed across the conditions[2]. Four cases that were identified as outliers on the income measure and two on SWLS (more than three standard deviations above or below the mean) were also removed from further analysis. This resulted in a sample of 146 participants, with household income ranging from £7,500 to £85,000 ($M=38,464$, $SD=23,629$). Due to the positively skewed distribution, we log-transformed the income variable for the further analysis. Mean, standard deviations and intercorrelations between variables are presented in Table 1.

Money and happiness. To investigate the effect of salience of money versus community on the relationship between income and SWLS, we conducted a moderated regression analysis. Two dummy variables were created to code three priming conditions (control=0, money=0, community=1, and; control=0, money=1, community=0). Interactions were computed between each of these dummy variables and the centered income variable. At Step 1 we regressed SWLS on gender. At Step 2 the centered income variable and two dummy variables were included as predictors. Finally, at Step 3 two interactions were added as predictors in the regression equation.

With all predictors entered, the full model accounted for significant variance in SWLS, $R=.15$, $F(6,138)=4.18$, $p<.001$. The effect of gender was significant ($F(1,142)=4.69$, $p=.032$), indicating that women reported more life satisfaction than men; $\beta=.18$, $t(143)=2.16$, $p<.001$. At Step 2, entry of the main effects was significant, $R^2_{ch}=.08$ $F_{ch}(3, 140)=4.13$, $p=.001$. Inspection of the regression coefficients at this step showed that this was due to a significant effect of income, $\beta=.27$, $t(140)=2.83$, $p=.005$. Participants with higher income

reported higher life satisfaction; the effect of gender was no longer significant. These main effects were qualified by a significant interaction between income and experimental condition, as indicated by a significant effect of the variables included at Step 3, R^2_{ch}=.043, $F_{ch}(2, 138)$=3.53, p=.032. A further exploration of this, revealed no relationship between income and SWLS in the control condition, β=.073, $t(41)$=.47, p=.64; a significant positive relationship in the money salient condition, β=.48, $t(56)$=3.85, p<.001, and; no relationship in the community salient condition, β=.02, $t(43)$=0.11, p=.90. Consistent with our prediction, income significantly predicted well-being only when economic concepts were salient in the judgmental context.

Social relationships and happiness. To investigate the effect of context on the relationship between indicators of social relationships (instead of income) and life satisfaction, we conducted a second regression analysis. Here, after controlling for gender, we regressed SWLS on perceived social relations (centered), the two dummy variables representing the experimental conditions and the interaction between these variables as described before.

With all predictors entered, the full model accounted for significant variance in SWLS, R^2=.26, $F(6, 138)$=8.05, p<.001. Note that the explained variance in this model is higher than the explained variance in the previous model. At Step 2 in this analysis (after controlling for gender), entry of the main effects was significant, R^2_{ch}=.23, $F_{ch}(3, 140)$=14.11, p < .001. The regression coefficients revealed that this was due to a significant effect of social relations, β=.45, $t(140)$=6.09, p < .001. Unlike income, this effect was not qualified by interactions involving experimental condition at Step 3, R^2_{ch}=.003, $F_{ch}(2, 138)$=.25, p=.78. Hence, participants who perceived their social relationships to be superior reported higher well-being, regardless of whether social relations or money was made salient in the judgmental context.

Discussion

The results of this study show that both social and economic forms of capital contribute to individual assessments of well-being. However, the role of economic capital depended on whether it had been made salient in the judgmental context. Specifically, income contributed to individual well-being only when participants were primed to think in economic terms. When money was not salient, or when alternative concepts were salient, income made no contribution to individual well-being. In contrast to the context-dependent effects of income on well-being, the effects of social relations were both stronger and more stable. The perceived quality of respondents' social relationships contributed significantly to the prediction of their well-being, but this effect did not vary as a function of the judgmental context. Priming community-related concepts didn't strengthen this relationship and priming economic concepts did not diminish it. Moreover, it is interesting to note that the model in which well-being was predicted on the basis of social relationships explained more variance than the model in which income was the key predictor. This particular finding is consistent with research by Helliwell and colleagues (2009) which found that social support has greater capacity to predict life satisfaction than income (Helliwell, 2006; Putnam, 2000). On this basis, it would seem that while directing people's attention to money can strengthen the importance of economic capital for individual happiness (DeVoe & Pfeffer, 2009), the same is not true for social relations, which appear to be a more stable basis for happiness than money.

Although interesting, it is possible that these patterns were a function of our experimental manipulation rather than some more general primacy of social relations over economic concerns. Specifically, our manipulation might have led to a valence asymmetry between the priming of money relative to the priming of social relations and it is notable that the sentences used for priming money-related concepts were mostly associated with negative states (e.g., "lack of money is the root of all evil") whereas the sentences used to prime

community-related concepts mostly referred to positive states (e.g., "friends are relatives you make for yourself"). This asymmetry could have contributed to the different results obtained in the money and community conditions. Further, given that these effects were obtained in a controlled laboratory setting, questions remain about whether similar patterns would be observed in a more naturalistic setting in which money (and community) are primed in less obvious ways. This was an issue that we sought to resolve in a second study.

Study 2

Our second study aimed to address a potential methodological weakness of our first study by using a priming manipulation that was not confounded with the valence of statements. To maintain a valence-neutral context, we conducted the study in a field situation that would function as a natural prime for money- or family-related concepts. In addition, we used a more comprehensive measure of satisfaction with social relationships. Finally, we also aimed to address the still open question about the process behind the observed contextual shifts in the importance of money.

Thus far we have argued that the dimensions along which the self is defined, and subsequently evaluated, are not static but rather vary as a function of contextual factors (e.g., cues, frames of reference) that make particular self-definitions, and dimensions of self-evaluation, meaningful (Lazarus & Folkman, 1996; Schwarz & Strack, 1995; 1999; Turner & Onorato, 1999). This line of reasoning is consistent with self-categorization theory (Turner, Oakes, Haslam & McGarty, 1994) which suggests that the ways in which people define themselves, and the dimensions on which they distinguish themselves from others, can also vary as a function of context. As agents in the world, we are capable of defining others and ourselves in terms of values that are *either* more economic (i.e., reflecting levels of perceived economic success) *or* more social (reflecting the social context), and different circumstances allow particular self-relevant values to be realized (e.g., Doosje, Haslam, Spears, Oakes, & Koomen, 1998; Van Rijswijk, Haslam, & Ellemers, 2006). Accordingly, different judgmental

contexts may make salient and reinforce particular *values* that inform the evaluation of one's standing in the world. Along these lines, we reasoned that contextual shifts in the values that define the self might parallel the observed shifts in the factors that are used to evaluate the self and assess individual happiness.

According to Schwartz (1994), personal values are defined as desirable goals that serve as guiding principles in people's lives. Schwartz derived ten motivationally distinct types of values that focus on different aspects of our life such as power, achievement, hedonism, stimulations, and benevolence. In addition, specific values prevail in certain environments. For example, working in the financial sector will most probably encourage power and achievement values, whereas working as a kindergarten teacher might trigger the importance of benevolent values. Thus, a given social context can enable individuals to realize certain values but might also block others (Sagiv & Schwartz, 2000).

On the basis this, we hypothesized that contexts have the capacity to affect a person's value system. To the extent that contexts make money salient, people may be more inclined to define themselves in terms of economic values. To the extent that contexts make social relations salient, people may instead define themselves more strongly in terms of communal values. To explore this possibility, we focused on contextual shifts in power and benevolence values. Power refers to the importance of social status, prestige, control and dominance of people and resources. Benevolence instead refers to preservation and enhancement of the welfare of people with whom one is in contact (Sagiv & Schwartz, 2000). Our prediction is that contexts that activate the concept of money (versus community) should also have consequences for self-defining values of power (versus benevolence) and that these shifts should parallel contextual changes to the relationship between income and well-being. We also explored whether the previously observed context-independency of the relationship between social relations and well-being also held in this study.

Pilot Study

Thinking about the everyday situations that could prime either community- or money-related concepts, we focused on the context of commuting to or from work. Following the logic of priming, we reasoned that people travelling from work are likely to be focused on money-related concepts because they are leaving a context that has defined the self in these terms. Conversely, people travelling from home are more likely to be focused on family- or community-related issues because the place they are leaving is one in which the self is defined in these terms. This reasoning seems plausible in so far as it applies the logic of priming to real-world settings. Nevertheless, to test the validity of this logic we conducted a pilot study that sought to establish the utility of direction of travel as a manipulation of economic versus communal self-definition.

Participants, design and procedure

Participants were an opportunity sample of 44 adults (aged 19 to 55; *M*=36.83, *SD*=10.13) travelling on a commuter train in the UK. Participants were predominately men (*n*=33) and employed in the private sector (*n*=31). Twenty participants were surveyed while traveling on the 08:15 morning service from Colchester to London Liverpool Street[3] on a Monday morning and 24 were surveyed travelling on the 18:02 service from London Liverpool Street to Colchester on a Friday evening. This route is a popular commuting route for people who work in London's business district.

Participants completed a short survey presented as research on "language ability and personal values". Participants were first asked to answer questions about their travel (where they are coming from, where they are traveling to). They were then asked to complete 12 word-stems using an identical methodology to Study 1. Finally, they answered some demographic questions concerning their age, gender, occupation, and the sector (private vs. public) in which they worked.

Results

We conducted a mixed ANOVA with the direction of travel (from work vs. from home) as a between-subject factor and the number of money-related and community-related words as the repeated measures factor. The analysis revealed no main effect for the direction of travel, $F(1,42)=0.38$, $p=.54$, $\eta^2_p=.009$; but a significant effect of the word type whereby participants completed more stems with community-related words ($M=1.36$, $SD=1.22$) than with money-related words ($M=0.68$, $SD=1.00$), $F(1,42)=8.53$, $p=.006$, $\eta^2_p=.17$. Importantly, this main effect was qualified by a significant interaction between the factors, $F(1,42)=5.09$, $p=.029$, $\eta^2_p=.11$. Pairwise comparisons revealed that participants coming from work used more money-related words to complete stems than participants travelling from home ($M_{from\ work}=1.00$, $SD=1.10$; $M_{from\ home}=0.30$, $SD=0.73$, $t(42)=2.43$, $p=.02$). Conversely, participants coming from home used more community-related words than participants travelling from work ($M_{from\ home}=1.60$, $SD=1.10$; $M_{from\ work}=1.16$, $SD=1.23$) although this difference was not statistically significant, $t(42)=1.10$, $p=.22$. This pattern supports the claim that money-related concepts are more salient (i.e., naturally primed) among people travelling from work than they are for people travelling from home. In the main study we applied this travel direction manipulation to the same design as used in Study 1.

Main Study

Participants and Design

Participants were 43 people travelling on a commuter train in the UK. Participants were predominately men ($n=27$) and employed in the private sector ($n=28$). Participants were aged between 24 and 58 ($M=41.13$, $SD=9.13$). Twenty two participants were travelling on a Monday morning service from Haslemere to London-Waterloo and 21 participants were travelling on the evening service from London-Waterloo to Haslemere on the same day (this route is a popular commuting route for people who work in London's business district)[4]. All individuals who took part in the study were travelling to or from work respectively, and

participated voluntarily. The independent variables were household income and satisfaction with social relationships. The dependent variables were life satisfaction and personal values.

Procedure and measures

Participants completed a short survey on the train. The study was presented as research on "commuters' life satisfaction". Participants were first asked to answer questions about their travel (where they were coming from, where they were traveling to), and then completed measures of income, satisfaction with social relationships, values and well-being.

Measures

Income. Respondents' household income was assessed with an open question asking respondents to indicate their current annual household income before tax.

Satisfaction with social relationships was measured with 15 items that covered a range of social domains, including family, workplace, and community (e.g., "I communicate regularly with close friends", "I make the effort to contact my family members regularly", "I feel a sense of connection to the community in which I live", "I feel close to the people that I work with", α=.81).

Subjective well-being was measured using one item. Participants were asked to answer the question, "How happy would you say you are these days?" and provided their responses on a scale ranging from 1 (*very unhappy*) to 7 (*very happy*; DeVoe & Pfeffer, 2009, Study 2).

Personal Values. We assessed the dimensions of, *power* and *benevolence* from Schwartz's (1992) basic values inventory. Participants were asked to rate the importance of each value as a guiding principle in their life. Their responses ranged from 7 (of supreme importance) through 3 (important) and 0 (not important) to -1 (opposed to values). The value subtype *power* was measured with the single values social power, authority, and wealth (α=.82). The value subtype *benevolence* was measured with the single values helpful, honesty, forgiving, and loyal (α=.66)[5].

Lastly, participants completed demographic questions — indicating their age, gender, profession, and work sector (public vs. private)

Results

Preliminary analysis

A MANOVA with direction of travel (from home vs. from work) as a between-subject factor and age, gender, income, and sector as dependent variables revealed no demographic differences between the samples, $F(4,31)=1.05$, $p=.40$, $\eta^2_p=.12$; all univariate tests Fs<2. Prior to the main analysis, variables were checked for outliers and missing values. Seven cases were excluded because they contained missing values for income. These were equally distributed across the two conditions. One case that was identified as an outlier on the income measure (more than three standard deviations above the mean) was also removed from further analysis. This resulted in a sample of 35 participants, with household income ranging from £24,000 to £500,000 ($M=110,485$, $SD=103,485$). Due to the positively skewed distribution, we log-transformed the income variable for the further analysis.

Main analysis

Money and happiness. Means, standard deviations and intercorrelations can be found in Table 2. To investigate the effect of direction of travel on the relationship between income and well-being, we conducted a moderated regression analysis. The condition was coded (from work=0, from home=1) and the income variable was centered. At Step 1, we regressed well-being on gender and age. At Step 2, the centered income variable and condition were included as predictors. Finally, at Step 3, the interaction between income and condition was included.

With all predictors entered, the full model accounted for significant variance in well-being, $R^2=.35$, $F(5, 29)=3.05$, $p=.025$. The effects of gender and age were not significant at Step 1, $F(1,29)=1.42$, $p=.25$, and neither were the main effects tested at Step 2, $R^2_{ch}=.017$, $F_{ch}(2, 30)=0.28$, $p<.1$. However, at Step 3, there was a significant interaction between

income and direction of travel, R^2_{ch}=.25, F_{ch}(1, 29) =10.90, p=.003. To explore this interaction, we conducted simple slope analysis (Aiken & West, 1991). For participants travelling from home (i.e., family/ community salient) there was a non-significant negative relationship between income and life satisfaction, β=-.23, t(17)=1.37, p = .172. However, for participants travelling from work (i.e., money salient) this relationship was significant and positive, β=.68, t(16)=2.50, p=.024. As predicted, income contributed to well-being only when money-related concerns were likely to be salient. Income did not contribute to well-being when social-related concerns were likely to be more salient than money.

Social relations and happiness. To investigate the effect of social relationships on well-being as a function of context, we repeated the above analysis with social relations (centred) as a predictor instead of income. With all predictors entered, the full model accounted for significant variance in well-being, R^2=.55, F(5, 29)=20.58, p=.04. Note that the variance explained by this model was higher than the variance explained by the previous model. The main effects entered at Step 2 (after controlling for gender and age that had no significant effect), were significant, R^2_{ch}=.21, F_{ch}(2, 30)=4.89, p=.004. Inspection of the regression coefficients showed that this was due to a significant effect of perceived social relations on well-being, β=.50, t(30)=3.12, p=.004. Direction of travel had no impact on well-being at this step, β=.007, t(30)=0.47, p=.96 and there was no interaction between context and social relations at Step 3, R^2_{ch}=.001, F_{ch}(1, 29)=.04, p=.85. As in Study 1, participants who perceived their social relationships to be superior reported higher life satisfaction, regardless of the contextual salience of money- or family-related issues.

Salient values. As can be seen in Table 2, benevolence values (M=5.84, SD=1.00) were rated as more important than power values, (M=3.68, SD=.53; t(34)=11.53, p<.001). To investigate whether direction of travel had an impact on this, we conducted two additional regression analyses. In the first analysis, after controlling for gender and income, we regressed power values on condition. With all the predictors entered, the full model accounted for

for significant variance in power values, R^2=.28, $F(4, 30)$=4.04, p=.015. Whereas gender had no effect, income was significantly related to power values, β=.45, $t(31)$=2.60, p=.014. Thus, the higher their income the more importance participants ascribed to power values. Interestingly and in line with predictions, direction of travel was also a predictor of power values, β=-.32, $t(31)$=-2.04, p=.05. Participants travelling from work ascribed more importance to power values than participants travelling from home. In the second regression model, we tested whether personal values that are related to benevolence are influenced by the salience of the context. Thus, we regressed benevolence values on condition after controlling for gender and social relations. With all the predictors entered, the full model did not account for a significant amount of variance in benevolence values, R^2=.06, $F(4, 30)$=0.53, p=.71; and no effects were statistically significant, $p's$>.28. However, paralleling the stability of social relations as a predictor of well-being across conditions, it is noteworthy that benevolence was generally valued more than power irrespective of the direction of travel (M=5.84 on a scale with a maximum value of 7).

Discussion

The results of Study 2 demonstrate that the relationship between income and well-being is affected by the contextual salience of money-related concerns. Consistent with Study 1, this study also shows that whereas the effect of income on life satisfaction varies across contexts, the contribution of social relations is stronger and more stable. Thus, these findings suggest that the power of family and community concerns to predict well-being is relatively constant and is not easily affected by external circumstances. In contrast, the predictive power of money-related concerns appears to be more context-dependent and fleeting.

Unlike in Study 1, we did not find a significant main effect of income on well-being. This is interesting in its own right as it should be noted that participants in this study were wealthier relative to the national average and would be classified as top-earners in the UK (see ONS, 2010). This may have flattened the influence of economic concerns on well-being

(Diener & Seligman, 2009; Frey & Stutzer, 2002). Despite this, it is interesting that even for this relatively wealthy sample, the salience of economic considerations had a significant bearing on the relationship between income and happiness. Supplementing these effects, parallel effects of context were observed on the centrality of different values to the self. When traveling from work, people placed greater value on power than when travelling from home. Consistent with the principles of self-categorization theory (Turner et al., 1994), this suggests that the shifting relationship between money and happiness coincides with shifts in self-related psychological structures, such as personal value systems.

Interestingly, in this study we were able to successfully translate the semantic priming task in Study 1 to a very different and more 'ecologically valid' setting (Bargh, 2006). Previous priming research has mainly been conducted in controlled laboratory settings. Our study demonstrates that priming can also play an important role in complex and stimulus-rich 'real-world' environments. Although the everyday environment of commuting contains numerous cues that can activate different thoughts and feelings across individuals, the fact that this specific contextual prime had a significant impact on the bases of individual well-being and on self-defining values underscores the importance of construct activation in the real world (Berger, Meredith, & Wheeler, 2008; Mogilner, 2010).

Although one aim of Study 2 was to address the possibility of valence asymmetry driving the effects in Study 1, one could still argue that direction of travel could also involve a valence asymmetry. Going to work may be less positive an experience than going home. However, our results indicate no main effect for direction of travelling on life satisfaction and the main study was conducted on one day to control for variation in life satisfaction across the week. Thus it is unlikely that valence asymmetries in our manipulations explain the observed effects.

General Discussion

This paper has explored the relationships between two different forms of capital (financial and social) and individual well-being and the role of context in shaping these relationships. Two studies demonstrate that activating money-related concerns via semantic (Study 1) or natural (Study 2) priming results in a strong positive relationship between income and happiness — a relationship that was absent without such priming. In contrast, social capital (i.e., satisfaction with social relationships) was a stronger predictor of well-being and this relationship was stable across contexts. As a partial explanation of this pattern, Study 2 suggests that the salience of community-related concepts and values is generally greater and more stable than that of economic concepts and values.

The present research makes an important contribution to the ongoing debate about whether or not income is an important determinant of happiness. Like other social psychological research (e.g., Akin et al., 2009; DeVoe and Pfeffer, 2009), we found that the money–happiness link is highly variable. Indeed, in the absence of activating economic concepts, our results suggest that income may have little or no bearing on individual happiness. Yet by comparing the effects of income with those of social relations, we are also able to extend previous research by demonstrating not only that social capital is equally (if not more) important for well-being, but also that this influence is less susceptible to contextual variation. In this sense, it can be argued that social relations provide a more solid foundation for happiness than money.

This last point is also consistent with work showing that priming money can, in fact, reduce happiness relative to priming time (Mogilner, 2010) because undermines motivations to spend time with friends and family. Together with our own findings, this highlights the fact that the relevant question in happiness research is not simply whether (or how much) money makes us happy. Instead, it seems more fruitful to reflect on how much attention people pay to money and what the consequences of this are. Similarly, we would argue that the academic

debate about whether or not money is the source of happiness might itself be drawing us away from properly understanding the sources of happiness that reside in our communities and social networks (e.g., Jetten et al., in press).

At a theoretical level, evidence that the capacity for economic and social capital to predict well-being is bound up with the salience of self-defining values (Study 2), suggests that understanding in this area may be advanced by appreciating the way in which well-being is contingent upon context-dependent self-definition and evaluation (e.g., in ways suggested by self-categorization theory; Turner et al., 1994). Looked at in these terms, one can argue that whether financial or social capital prove to be the source of happiness, will depend not only on factors that make these things temporally or chronically salient, but on the broader social systems within which these two forms of capital are valued and embedded.

Limitations and future research

Although our findings were consistent across studies, there are several limitations that warrant consideration. First, our samples were not representative of the UK (or elsewhere) in terms of their income — being high relative to national averages. Thus we have to be cautious when seeking to generalize on the basis of our findings. Although we used different measures of subjective well-being across studies, these measures are susceptible to contextual change (Kahnemann & Krueger, 2006). As such, before generalizing it would also seem important to replicate these findings with alternative indicators of well-being (e.g., the General Health Questionnaire: DeVoe Pfeffer, 2009).

Future research also needs to further consider *why* the effect social relations on well-being seems to be more stable than the effects of money. Our initial prediction was that the effect of social relations should be context-dependent in the same way that the effect of money is. This prediction was not confirmed. Instead across both studies there was evidence that social relations were a stable, context-independent, predictor of well-being. Although this effect can be explained (e.g., with reference to the enduring importance of social relations; or

to the role of structural factors in making these chronically salient), any explanation is inevitably post hoc.

Conclusion

What makes people happy? Is it simply money, or does happiness stem from looking outwards toward our social networks and communities? The two studies presented suggest that while happiness can have an economic basis, this basis is unstable and dependent on the concepts and values that are activated in the context within which people contemplate their happiness. In comparison, the quality of social relations seems to be a more important basis for individual happiness, and one that is less susceptible to contextual variation. In demonstrating these points, our analysis provides evidence for a different way of thinking about age-old questions about the source of individual happiness. It suggests that if we want to know what makes us happy, we need to account for the context in which this question is posed, and how this context structures the values attached to the self. When communal values are relatively more central to people's sense of self, as they were in this research, it appears that social capital may provide a more stable and enduring basis for happiness.

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Notes

[1] Social scientists typically refer to *happiness* (a philosophical term) as *subjective well-being*. Subjective well-being refers to a person's positive (or negative) evaluation of his or her life, with reference to things such as positive emotional states, and the sense of meaning, purpose and fulfillment. In line with this usage, we will use the terms happiness, well-being and life satisfaction interchangeably (Ahuvia, 2008; but see Ryan, Huta, & Deci, 2008).

[2] We compared participants who did not indicate their income with those who did on the life satisfaction measure as well as the measure of social relations. On both these variables, there were no significant differences between those participants who did not indicate their income compared to those who did, $F(2,188)=.68$; $p=.51$, $\eta^2_p =.007$

[3] All data were collected by the same (two) experimenters. Efforts were taken to ensure that the same individuals who completed the questionnaire in the morning did not also do so in the afternoon — although this was unlikely to happen since the train lines selected for these studies transport up to 400,000 people per day (with at least four trains per hour on each of the routes on which data were collected).

[4] In the main study all participants were asked at the same day of the week to control for potential variability in reported well-being due to systematic differences in daily well-being across the week (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000).

[5] Although the reliability for the benevolence measure was relatively weak, Cronbach's alpha was above .60 and we deemed this acceptable in light of the fact that this is an established scale.

Table 1.

Means, Standard Deviations and Intercorrelations, Study 1 (N=146)

Variable	*M*	*SD*	2	3
1. Life satisfaction	4.02	1.13	.20*	.47*
2. Household income	38,464	23,629		.17*
3. Social relations satisfaction	4.31	1.09		

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

Table 2.

Means, Standard Deviations and Intercorrelations, Study 2 (N=35)

Variable	*M*	*SD*	2	3	4	5
1. Life satisfaction	5.25	1.19	.045	.46**	.12	-.06
2. Household income	110,485	103,100		-.14	.44*	-.01
3. Social relations	4.71	0.80			-.08	.08
4. Power	3.68	1.00				.07
5. Benevolence	5.84	0.53				

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