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## Basic personal values, the country's crime rate and the fear of crime

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(Article begins on next page)

Values, crime rate, and fear of crime 1

Running head: VALUES, CRIME RATE, AND FEAR OF CRIME

Basic Personal Values, Country's Crime Rate, and Fear of Crime

Abstract

The main aim of this study was to understand if and how basic personal values, drawn on Schwartz's value theory, can influence the expression of individual fear of crime by analysing the moderating role of contextual cues (i.e., crime rates). We performed a multinational, multilevel study using the 2008 European Social Survey dataset ( $N = 53,692$ , nested in 27 European countries). Fear of crime, which is a generalized insecurity and anxiety about personal safety, showed a positive association with conservation (i.e., tradition, conformity, and security), and a negative association with openness to change (i.e., hedonism, stimulation, and self-direction) and self-transcendence values (i.e., benevolence and universalism). With the exception of self-transcendence, all the associations between basic values and fear of crime were amplified by the country's crime rate: The higher the crime rate, the stronger the relation between values and fear of crime. Implications and limitations of these results and possible further research directions are discussed.

Keywords: Basic personal values, Crime rate, Fear of crime, Multilevel analysis.

### Basic Personal Values, Country's Crime Rate, and Fear of Crime

Fear of crime, i.e., a generalized insecurity and anxiety about personal safety, is the adequate psychological reaction to the risk of being victimized (Russo, Roccato, & Vieno, 2013). When proportioned to people's effective risk of victimization, fear of crime has desirable consequences, in that it helps to minimize the probability of having negative consequences at the physical, the psychological, and the economic level (Fattah, 1993). However, when disproportionate, it can dramatically hinder the quality of life of individuals, communities, and even societies.

At the individual level, fear of crime threatens people's wellbeing and their state of health, precluding them the opportunity to perform physical activities outside their home (Kilgour, 2003; Stafford, Chandola, & Marmot, 2007), and leads to relevant losses (e.g., leading people to use taxis instead of underground trains, to spend money buying alarms instead of cultivating their hobbies, etc.) (Dolan & Peasgood, 2007). For instance, Anderson (1999) showed that, on average, each U.S. citizen spends two minutes per day opening and closing locks, which translates into a diminishing returns equivalent of \$ 400 *per capita*. At the community level, fear of crime contributes to some places turning into "no-go" areas via a withdrawal from community and to drain community cohesion, trust, and neighbourhood stability (Dupéré & Perkins, 2007). At the societal level, it may lead to the delegitimization of outgroups, to the reduction of cohesion and solidarity, and even to the development of an "ideology of safety" capable to turn the legitimate demand for living in safe communities into an attempt to make acceptable the most violent racist and xenophobic behaviours (Amerio & Roccato, 2005).

In this line, just like crime itself, fear of crime should be considered one of the most significant social problems that national institutions have to deal with (Taylor & Hale, 1986; Valera & Guàrdia, 2014). The main aim of this study was to understand if and how personal

basic values can influence the expression of individual fear of crime by analysing the moderating role of contextual cues (i.e., crime rates).

When predicting personal fear of crime, researchers have given high relevance to three families of individual variables. First, physical and social vulnerability, typically assessed using socio-demographic proxies: The elderly (Fitzgerald, 2008), women (Ferraro, 1995), the poor (Pantazis, 2000), and poorly educated people (Austin, Woolever, & Baba, 1994) usually show higher levels of fear of crime than their counterparts do. Second, criminal victimization. Results have been somewhat contrasting (for a review, see Hale, 1996); however, when victimization and fear of crime are assessed using methodologically sound questions and participants' vulnerability is partialled out, a strong and positive link between victimization and fear of crime emerges (e.g., Killias & Clerici, 2000; Pantazis, 2000). Third, recent studies performed at the ecological level found that fear of crime reflects not only personal vulnerability and victimization experiences, but also broader conditions of disorder and disadvantage in the community (e.g., crime rate, social and physical disorder, economic disadvantage, low expenditure on education and social protection) (Roman & Chafin, 2008; Vieno, Roccato, & Russo, 2013). That is why hierarchical linear modelling, allowing researchers to measure the impact exerted by individual and ecological variables net of each other and to model cross-level interactions between personal and contextual variables (Raudenbush & Bryk, 2002), provided the most appropriate approach to predict fear of crime. Using this interactive approach, research showed fear of crime to be higher among victimized people living in disordered (Roccato, Russo, & Vieno, 2011) or economically disadvantaged (Roccato, Vieno, & Russo, 2013) environments.

The prevailing focus on socio-demographic, victimization, and contextual variables has led researchers to pay little attention to the stable psychological antecedents of fear of crime, even if there is evidence that fear of crime is related to the way of representing and

evaluating oneself and one's own social context (e.g., Hummelsheim, Hirtenlehner, Jackson, & Oberwittler, 2011; Van der Wurff, Van Staalduinen, & Stringer, 1989; Vitelli & Endler, 1993). In spite of the relevant heuristic power that personal values have in other psychological domains (Hitlin & Piliavin, 2004; Rohan, 2000), and of research showing that people's responses to crime reflect their commitment to particular ways of life (Jackson, 2009), values have been rarely used to predict fear of crime (for an exception, see Russo & Roccato, 2009). Most importantly, to the best of our knowledge, researchers have never investigated the variation across social contexts in the relation between personal values and fear of crime. This is particularly relevant, in that recent research—consistent with classic approaches in social (Lewin, 1936) and personality (Mischel, 1968) psychology—often showed that psychological predispositions lead people to react differently to common environmental stimuli, as a function of the characteristics of the situation they are living in (Mondak, Hibbing, Canache, Seligson, & Anderson, 2010). In the present study, relying on Schwartz's value theory (1992), we performed the first multinational, multilevel study to analyse the conditional relation between basic personal values and individual fear of crime via the moderation of the country's crime rate.

### **Basic Personal Values: Their Contents and Their Relations**

In the last two decades, psychosocial research on values has been dominated by Schwartz's theory of value content and structure (1992). This theory, which has been supported in hundreds of samples from over 70 countries (Schwartz, 2006), provides an optimal framework for a systematic and cross-cultural investigation of the impact of basic values on various forms of attitudes and behaviours.

According to this theory, values are desirable, trans-situational goals, varying in importance, which serve as guiding principles in people's lives. Ten motivationally distinct basic values were derived by Schwartz (1992) from three universal requirements of the

human condition (i.e., needs of individuals as biological organisms, requisites of coordinated social interaction, and survival and welfare needs of groups): power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. These basic values are dynamically related and exhibit a quasi-circumplex structure that derives from the fact that actions taken in the pursuit of each value have psychological, practical, and social consequences, which may conflict or may be compatible with the pursuit of other values.

At a higher level of abstraction, the oppositions between competing values can be summarized by viewing values as organized along two bipolar dimensions: openness to change (hedonism, stimulation, and self-direction) versus conservation values (tradition, conformity, and security), and self-enhancement (power and achievement) versus self-transcendence values (universalism and benevolence). The first dimension captures the conflict between the emphasis on one's own independent thought and action, and favouring change versus self-restriction, preservation of traditional practices, and protection of stability. The conflicting motives represented by the self-enhancement/self-transcendence dimension are the extent to which people enhance their personal interests, even at the expense of others, versus the extent to which people transcend selfish concerns and promote the welfare and interests of others (Schwartz, 1992, 2006).

Beyond congruence and conflict among the values that are implicated simultaneously in actions, Schwartz (2012) has recently proposed a further organizing principle, which is the relation of values with anxiety. According to this principle, conservation and self-enhancement should be considered as self-protective values: Pursuit of them serves to cope with anxiety due to uncertainty in the social and physical world by avoiding conflict and maintaining the current order (conservation) or by actively controlling threat (self-

enhancement). Openness to change and self-transcendence are instead growth or self-expansive values, which promote gain of goals by expressing anxiety-free motivations.

Accordingly, self-enhancement values were found to be positively related—while self-transcendence values negatively related—to micro-worries, which are worries about self or people with whom one identifies her/himself (e.g., “I am worried about getting ill”; “I am worried that my parents will die”) (Boehnke & Schwartz, 1997; Boehnke, Stromberg, Regmi, Richmond, & Chandra, 1997). Taken as a whole, empirical findings showed that the self-enhancement/self-transcendence dimension is more effective than the openness to change/conservation dimension in predicting worries. Moreover, a social-cognitive analysis suggested that values influence worries by increasing attention to, and perception of threats to, valued goals (Schwartz, Sagiv, & Boehnke, 2000). Recently, Russo and Roccato (2009) suggested fear of crime to have several analogies with micro-worries (although the first is an affective more than a cognitive response) and examined the links between personal values and fear of crime. Their results, gained on a representative sample of the Italian population, led them to re-evaluate the importance of the openness to change/conservation dimension: On average people whose value priorities addressed conservation reported higher levels of fear of crime than did people focused on openness to change values.

Although most of the above-mentioned studies involved participants from different countries (i.e., Boehnke et al., 1997; Boehnke & Schwartz, 1997; Schwartz et al., 2000), none of them formally analysed cross-national differences in values, in normative expressions of worries and fears, and in exposure to different kinds and amounts of objective threat. Given the individual-level of analysis adopted by these studies, macro-contextual factors and interactions between individual and ecological variables were constantly neglected. However, recent multilevel research has shown that stable basic values do influence psychological outcomes in interaction with environmental variables. In particular, values have been found

to correlate more strongly with attitudes and behaviours when they are central to the self and are “activated” (i.e., they are temporarily salient) by the context (Verplanken & Holland, 2002). Consistent with this, in their multi-level meta-analysis, Boer and Fischer (2013) reported that disease stress lowered attitude–value associations: Given the strong social pressure in high disease stress contexts, it is likely that social control aimed to prevent the spreading of disease reduces the relative importance of stable individual differences such as personal values. Uncertainty avoidance was associated with stronger attitude–conservation value links, as the expression of conservation through actions that support social norms is encouraged and reinforced in this context. On the contrary, with increasing uncertainty avoidance and individualism, self-transcendence (vs. self-enhancement) values more consistently guided individuals’ attitudes toward fairness, care, prosocial, and religious issues.

### **Research Aims and Hypothesis**

The aim of this study was to analyse the relations between basic personal values (i.e., conservation, openness to change, self-enhancement, and self-transcendence) and fear of crime in samples from different countries, and to test whether and how these relations change across countries with different crime rates. In doing so, we controlled for the effects of other individual (i.e., gender, age, education, city dimension, and victimization) and ecological variables (i.e., unemployment and uncertainty avoidance), which showed to be significantly related to fear of crime (Russo & Roccato, 2009) or to moderate the impact of values on attitudes and behaviours (Boer & Fischer, 2013).

According to the literature (Schwartz, 1992, 2006), conservation values and self-enhancement values express the importance people attribute to self-interests and self-protection (i.e., avoiding uncertainty by maintaining the current order or by actively avoiding or controlling the threats) and lead people to be primarily concerned about their own personal

outcomes. Openness to change values and self-transcendence values, instead, show much weaker, if any, links with concerns about uncertain personal consequences. Indeed, people who value openness to change desire new and challenging experiences, and people who value self-transcendence express concern more for the welfare of others than for themselves (Schwartz, 2012). Thus, we expected fear of crime to show positive associations with conservation and self-enhancement (Hp1) and negative associations with openness to change and self-transcendence (Hp2).

Relying on the idea that “activated values” can trigger goal-directed cognitive and behavioural processes, we focused on criminality as a potential prompt of fear of crime among people valuing self-protection goals. Indeed, given that criminality jeopardises the social order and the dominant social norms, it represents a normative threat that has in itself the power to activate stable predispositions, attitudes, and values (Stenner, 2005). It is realistic that attributing importance to self-protection, combined with the experience of threats to personal certainty, results in a high attention to such threats, and in an intense fear associated with them. Thus, we expected crime rates to enhance the effects exerted on fear of crime by self-protection values (conservation and self-enhancement) (Hp3). In contrast, we did not expect any significant changes in the strength of associations between self-expansive values (openness to change and self-transcendence) and fear of crime according to the country’s crime rate.

## **Method**

### **Dataset**

We performed a secondary analysis on individual-level data gathered by the European Social Survey (ESS) in 2008, complemented with country-level data from Eurostat/ESSPROS (<http://epp.eurostat.ec.europa.eu>) and from the Hofstede Centre’s website (<http://geert-hofstede.com/countries.html>). The sample ( $N = 53,692$ , 45.6% males, mean age

= 47.55,  $SD = 18.81$ ) was representative of the population living in 27 European countries.<sup>1</sup>

Additional details of the sample and the interviews procedure can be found in the ESS website (<http://www.europeansocialsurvey.org>).

## Measures

### Individual level variables

**Fear of crime.** In the ESS dataset the four-category standard item from the National Crime Victimization Survey (NCVS: “How safe do you—or would you—feel walking alone in your neighborhood after dark?”: see <http://www.bjs.gov/index.cfm?ty=dcdetail&iid=245>) was available. This item is widely used in research performed on fear of crime (e.g., Flatley, Kershaw, Smith, Chaplin, & Moon, 2010; Vieno et al., 2013). Moreover, according to Hummelsheim and colleagues (2011, pp. 332), it is “highly suitable to measure general feelings of insecurity projected onto the symbolic issue of crime”. However, the standard item has been criticized mainly because it does not make direct reference neither to crime, nor to fear. Thus, consistent with the literature, according to which crimes against the person and against the property are both triggers of fear of crime (Shotland et al., 1979; Skogan & Maxfield, 1981), we complemented this item with two more questions, respectively focused on these two kinds of crime: (a) “How often, if at all, do you worry about your home being burgled?”, with four response categories ranging from 1 (all or most of the time) to 4 (never); and (b) “How often, if at all, do you worry about becoming a victim of violent crime?” with

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<sup>1</sup> In the ESS dataset, individual information for respondents living in 29 countries was provided (Belgium, Bulgaria, Switzerland, Cyprus, Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, United Kingdom, Greece, Croatia, Hungary, Ireland, Israel, Latvia, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Sweden, Slovenia, Slovakia, Turkey and Ukraine). However, we had to exclude participants living in Cyprus and Ukraine because country level data were not available.

four response categories ranging from 1 (all or most of the time) to 4 (never). After reversing the last two items, and based on  $\alpha = .71$ , we computed a mean index of fear of crime with higher scores indicating high levels of fear.

**Values.** We used the 21-Portrait Values Questionnaire (PVQ, Schwartz, 2003) to measure basic personal values. Respondents indicated how much they felt (dis)similar to 21 short descriptions of a hypothetical person (e.g., “It is important to him/her to live in secure surroundings. He/She avoids anything that might endanger his/her safety”) on a scale ranging from 1 (not like me at all) to 6 (very much like me). We computed four mean indexes assessing the importance given to conservation (six items tapping the dimensions of tradition, conformity, and security,  $\alpha = .75$ ), openness to change (six items tapping dimensions of hedonism, stimulation, and self-direction,  $\alpha = .79$ ), self-enhancement (four items tapping power and achievement,  $\alpha = .75$ ), and self-transcendence (five items tapping benevolence and universalism,  $\alpha = .74$ ).

**Control variables.** We used gender (0 = woman, 1 = man), age, years of education, and city dimension (0 = residence in a small town, country village or countryside, 1 = residence in a big city or suburbs of a big city) as individual-level control variables. Moreover, we controlled for victimization, i.e. whether the respondent or a member of his/her household has been victim of a burglary or assault in the five years preceding the survey (0 = no, 1 = yes).

#### **Country level variables**

**Crime rate.** Like it is often done both in multilevel research on fear of crime (Russo, Roccato, & Vieno, 2011, 2103) and in other venues of research focussed on contextual threat (e.g., Roccato, Vieno, & Russo, 2014), we computed the country’s crime rate as the ratio between the amount of all the crimes reported to the police force during 2006 and the number of people living in each country. Given that this measure of the crime rate includes both the

crimes against the person and those against the property, it shows nice links with our dependent variable.

**Control variables.** We controlled for the country's unemployment rate (downloaded from the Eurostat/ESSPROS's website) and uncertainty avoidance (UA) (downloaded from the Hofstede Centre's website). The higher the UA scores, the higher is the discomfort with uncertainty and ambiguity.

### Data Analysis

To predict fear of crime, we ran two-level hierarchical regression models using the Hierarchical Linear Modeling software (Raudenbush & Bryk, 2002). After running a preliminary unconditional model, we examined the impact exerted by participants' four basic personal values (based on Raudenbush & Bryk, 2002, we group centred them<sup>2</sup>) by partialling out the effects of our individual control variables (Model 1); moreover, we estimated the variability of this effect. In Model 2, we entered the crime rate and our contextual control variables (at the country level) to explain the variability of the effect that the four values had on the dependent variable.

Levels of fear of crime between individuals were modelled at level 1:

$$y_{ij} = \beta_{0j} + \beta_{1j} (\text{gender}) + \beta_{2j} (\text{age}) + \beta_{3j} (\text{victimization}) + \beta_{4j} (\text{education}) + \beta_{5j} (\text{city dimension}) + \beta_{6j} (\text{conservation}) + \beta_{7j} (\text{openness to change}) + \beta_{8j} (\text{self-enhancement}) + \beta_{9j} (\text{self-transcendence}) + r_{ij}.$$

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<sup>2</sup> Group mean centring removed all between-country variation in value dimensions. At the conceptual level centring at the group mean yields a pure estimate of the moderating influence that a level-2 predictor exerts on the level-1 association between two variables and cannot be distorted by the presence of an interaction that involves the cluster mean of the independent variable (Enders & Tofighi, 2007). That is why Hofmann and Gavin (1998) and Raudenbush (1989) recommended group mean centring when cross-level interactions are of substantive interest, as in our case.

In this equation,  $\beta$ 's represent the impact of the individual level variables we used (gender, age, victimization, education, city dimension, and values). The subscript  $j$  represents the countries of the participants ( $j = 1, \dots, J$ ), and the subscript  $i$  is for the individual participants ( $i = 1, \dots, N_j$ ). The random effect is represented by  $r_{ij}$ .

At level 2, the variability of the effects of the four values was modelled as a function of the crime rate both after controlling for the effects of the contextual control variables (unemployment and uncertainty avoidance) and after introducing the principal effects of those variables (expressed at the second level as the effects exerted by those variables on the variability of the intercepts: effects on  $\beta_{0j}$ ):

$$\beta_{0j} = \gamma_{00} + \gamma_{01} (\text{crime rate}) + \gamma_{02} (\text{unemployment}) + \gamma_{03} (\text{uncertainty avoidance}) + u_{0j}$$

$$\beta_{6j} = \gamma_{60} + \gamma_{61} (\text{crime rate}) + \gamma_{62} (\text{unemployment}) + \gamma_{63} (\text{uncertainty avoidance}) + u_{6j}$$

$$\beta_{7j} = \gamma_{70} + \gamma_{71} (\text{crime rate}) + \gamma_{72} (\text{unemployment}) + \gamma_{73} (\text{uncertainty avoidance}) + u_{7j}$$

$$\beta_{8j} = \gamma_{80} + \gamma_{81} (\text{crime rate}) + \gamma_{82} (\text{unemployment}) + \gamma_{83} (\text{uncertainty avoidance}) + u_{8j}$$

$$\beta_{9j} = \gamma_{90} + \gamma_{91} (\text{crime rate}) + \gamma_{92} (\text{unemployment}) + \gamma_{93} (\text{uncertainty avoidance}) + u_{9j}$$

In these equations, the  $u$ 's represent the random coefficients. All of the errors terms of the other parameters at the individual level (gender, age, victimization, education, and city dimension) in the model were fixed.

## Results

Table 1 presents the descriptive statistics for the variables we have used and their correlations.

A preliminary unconditional model showed a significant variation of fear of crime at the country level (see Table 2). The models where we fixed to zero the error terms of the slopes of our individual-level independent variables (with the exception of the four values) partially supported  $H_{p1}$  and  $H_{p2}$ , showing that conservation values were positively related to fear of crime, while openness to change and self-transcendence values were negatively related to the

dependent variable. Regarding our individual-level control variables, consistent with the literature (e.g., Hale, 1996) males, younger people, respondents living in smaller cities, and participants not previously victimized were less prone to manifest fear of crime.

The relations between values and fear of crime were significantly variant across individuals from different countries (see the between countries  $\beta_j$  line and respective  $\chi^2$  values). In particular, there were significant cross-level interactions between conservation values and self-enhancement values on the one hand and the country's crime rate on the other. Consistent with Hp3, in countries characterised by high vs. low crime rates the importance attributed to conservation and self-enhancement was more strongly and positively associated to fear of crime (see Figures 1 and 2). Moreover, somehow diverging from our expectations, there was also a significant cross-level interaction effect between openness to change and the country's crime rate on the level of fear of crime: The importance people gave to openness to change values led them to experience lower levels of fear of crime, especially in high crime-rate countries (see Figure 3). The relation between self-transcendence and fear of crime, instead, did not change according to the country's crime rate.

### Discussion

According to Lewin (1936), every event is the consequence of the interaction between the state of the person and, at the same time, the state of the environment in which s/he lives. In this light, the effects of stable individual differences are moderated at least in part by the characteristics of the context (Mischel, 1968). Consistent with this idea, Mondak and colleagues (2010) more recently stated that "variation in people's psychological predispositions leads them to respond differently when exposed to common environmental stimuli, and, correspondingly, that the expression of personality traits will vary by situation" (p. 90).

**Commentato [r1]:** Preso di peso da un altro nostro articolo. Se Dani riesce a parafrasare un po' bene, se no fottiamocene

However, the large majority of the studies on fear of crime have been focussed on structural variables (such as people's gender, age, and status: see Austin et al., 1994; Fitzgerald, 1995; Pantazis, 2000) and on criminal victimization (Hale, 1994; Killias & Clerici, 2000; Pantazis, 2000), or on ecological predictors (such as the crime rate, disorder, and expenditure in welfare: see Roman & Chaflin, 2008; Vieno et al., 2013). Only a few of these contributions approached fear of crime by focussing on stable individual differences (see, for instance, Russo & Roccatò, 2009), and none of them were focussed on their interaction with the social characteristics of the place people live in. In this study we analysed the relations between Schwartz's basic personal values (i.e., conservation, openness to change, self-enhancement, and self-transcendence) and fear of crime (i.e., a specific emotional response of anxiety to crime) in 27 European countries. Working with a multilevel approach, we examined whether and the extent to which the links between values and fear of crime were moderated by the country's crime rate.

The results supported the significant association between basic personal values and fear of crime. Values had unique effects on fear of crime, over and above the contributions of gender, age, education, city dimension, and victimization. The overall pattern of associations observed across countries exhibited the integrated pattern based on the motivational structure of the value system, with conservation values in opposition to openness to change and self-enhancement values in opposition to self-transcendence (Schwartz, 1992). In particular, conservation values (i.e., tradition, conformity, and security) were positively related to fear of crime, while openness to change values (i.e., hedonism, stimulation, and self-direction) were negatively associated with the dependent variable. Conservation values, especially security, express the importance of sense of belonging, stability, and safety and aim at avoiding physical and psychological ambiguity, danger, and risk. On the contrary, openness to change values promote the goal of pleasant arousal for self, independent action, thought, and feeling

and readiness for new experiences. While hedonism and stimulation values share the goal of self-gratification and self-oriented interests, self-direction values, which promote autonomy and exploration, are related to fewer concerns about uncertain personal consequences (Schwartz et al., 2010).

Additionally, self-transcendence values (i.e., universalism and benevolence) were negatively associated with fear of crime, while self-enhancement values (i.e., power and achievement) were positively related to the dependent variable, but only in high crime-rate countries. While both universalism and benevolence emphasize concerns for others, thus promoting pursuit of other-enhancing goals, both power and achievement express self-interests, although with different mechanisms and strength. In particular, power values, which are directed toward control or dominance over people and resources, are likely to be the most self-centered of the self-enhancement value types, and to produce the greatest concern with people's own outcomes. Achievement values instead emphasize demonstrating competences to gain social approval, so that their pursuit cannot fully ignore the interests of others (Schwartz et al., 2000).

Thus, as we hypothesized (Hp1 and Hp2), the importance given to self-protection values (i.e., conservation and self-enhancement) showed to reinforce the fear of being a victim of crime. On the contrary, the importance attributed to self-expressive values (i.e., DANI COMPLETA) reduced fear of crime—even independently from previous victimization experiences. Among higher-order value dimensions, the ten value types could have different mechanisms and patterns of association with fear of crime, depending on the specific goals to which each value type is directed. Generally speaking, it is likely that greater is the concern with own interests expressed by a value, stronger is the positive association between that value and fear of crime. Future research focused on the value types could be of help in disentangling the specific contribution of each of them in predicting fear of crime.

Of particular interest were the variations in the strengths of value-fear of crime links according to the country's crime rate. In accordance with our third hypothesis, conservation values and self-enhancement values reinforced fear of crime especially in high-crime rate countries. Attributing importance to security, tradition and conformity, as well as to power and achievement, may lead to an increased dread about crime, since crime and social disorder are some of the more dangerous threats that may exist for people pursuing these values (Duckitt, 2001). This is consistent with Verplanken and Holland's thesis of value activation (2002), which suggests that the temporarily salience of values increases their effects, and with Schwartz's norm-activation theory (1977), which states that an important antecedent of worries and fears is the activation of a personal moral norm. The activation takes place when the individual perceives, puts attention on, and interprets environmental conditions that threaten his/her personal values, that is, when the individual is aware of the risk of "value violation". Accordingly, the relation between self-transcendence values and fear of crime did not change as a function of the country's crime rate. It is indeed likely that the crime does represent neither a direct threatening nor a strong incentive for values such as universalism (e.g., world peace, respect for nature) and benevolence (e.g., forgiveness, honesty, friendship).

Surprisingly, also the relation between openness to change values and fear of crime turned out to be moderated by the country's crime rate: The greater importance given to hedonism, stimulation, and self-determination, the less intense fear of crime especially for those people experiencing situations that pose risks and challenges. We could thus speculate that risky contexts, such as high-crime contexts, activate openness to change values, by reinforcing and validating people's goal to "pursue new, challenging, and uncertain personal outcomes, both physical and intellectual" (Schwartz et al., 2000, p. 321).

Thus, overall, with the exception of self-transcendence, the links between basic personal values and fear of crime were significantly moderated by the country's crime rate in the direction of increase of the value impact. Conservation and self-enhancement values, which were positively related to fear of crime, were more positively related to the dependent variable in high-crime rate countries; openness to change values, which were negatively related to fear of crime, were more negatively related to the dependent variable in high-crime rate countries. In other words, a high-crime context showed to amplify the (positive or negative) effects of value preferences: It is likely that "value violation" and "value validation" are both mechanisms able to activate personal values and their effects. Studying the psychological meanings and the behavioural manifestations of the fear of crime in "self-protective" vs. "open to change" people will be an interesting future research aim, also in order to support the development of adequate social protection policies in preventing negative consequences of fear of crime.

This research had some strong points. Generally speaking, it was based on a modern, convincing approach, aimed at predicting individual outcomes as a function of the interaction between stable individual variables and contextual features of the environment people live in. At present, a number of studies showed this approach to be fruitful. For instance, Roccato, Vieno, and Russo (2014) showed that people's authoritarian predispositions need a threatening environment to give rise to the manifestations of authoritarianism. Moreover, the same authors showed that criminal victimization pushes people to vote right-wing parties just if living in economically disadvantaged areas (Roccato, Vieno, & Russo, 2013). Finally, AVETE QUALCHE CITAZIONE NON NOSTRA? SE NE AVETE UN PAIO POTREMMO TOGLIERE LA PRIMA... However, when values are concerned, the major controversy of whether the effects of values are universal or determined by the context (Boer & Fischer, 2013) is still open. For a long time, the common definitions of values assumed

that values are “contextual-free” and universally related to attitudes and behaviors (Hitlin & Piliavin, 2004; Rohan, 2000). On the contrary, at present the researchers interested in values increasingly agree that the effects of individual differences are modulated—at least in part—by the characteristics of the social environment (e.g., Barni, Vieno, Rosnati, Roccato, & Scabini, 2014). However, the empirical evidence to date is rather scarce.

Our analysis helped us to take a solid position in this debate, showing clearly that research on values may be fine-tuned by examining the moderator effect exerted by the context: Values, which may be thought as reasonably stable individual goals, express themselves to varying *degrees* under different environmental conditions. In our study, they yielded the strongest associations with personal fear of crime in response to a high-crime rate context that is likely to make values more salient by threatening or supporting them. Second, we analysed data from national representative samples using a multilevel approach. This allowed us to present generalizable results that helped to disentangle the effects exerted on fear of crime by individual variables, by contextual variables, and by their cross-level interactions.

On the negative side, our results could not prove causality due to the correlational nature of the study. Although previous studies supported—at least conceptually—a causal link from personal values to worries and fears (e.g., Russo & Roccato, 2009; Schwartz et al., 2000), values may influence fear of crime, but fear of crime may also influence personal values. Longitudinal and/or experimental studies are therefore needed to address possible reciprocal relations between values and the fear of being a victim of crime. Moreover, our study proposed a series of mechanisms (i.e., “value violation” and “value validation”) through which the country’s crime rate might moderate the relation between values and fear of crime, but without being able to test them directly. Thus, future research providing a direct

test of these mechanisms, that link the macro to the micro levels, should be germane to shed light on how *contextualized* values function.

Moreover, that by Schwartz is just one of the two most representative approaches to values. The other one is that by Inglehart (1990, 2006), focussed on the opposition between materialist (aimed at maximising personal and economic security) and postmaterialist (aimed at maximising freedom, self-realisation, and quality of life) values. In Russo and Roccatò's (2009) research, materialist values showed a significant association with fear of crime: the greater was the importance given to the values emphasizing personal and economic security, the stronger was participants' fear of crime. However, these authors used an individual approach, and analysed main effects only. Although some overlap between Schwartz's and Inglehart's value theories, they could give a specific and complementary contribution in understanding personal and social issues (Dobewall & Rudnev, 2014). Thus, a replication of the present study focused on Inglehart's operationalization of values would be interesting.

Finally, our assessment of fear of crime could be improvable, in that we just could combine the standard NCVS item on fear of crime with two more items, respectively focalised on fear of crimes against the person and against the property. In future studies it might be beneficial to assess fear of crime using formally validated scales. For instance, Rader (2004; Rader et al. 2007) recently developed an integrated model of the psychological reactions to crime, focused on a new dependent variable, labelled as "threat of victimization", and composed of three dimensions: (a) crime risk perception, which is the cognitive dimension of the construct; (b) fear of crime, which is its emotional dimension; and (c) constrained behaviours, which are its behavioural dimension. Rader's approach has been often quoted (e.g. Carro, Valera, & Vidal, 2010; Randa & Wilcox 2010), but seldom used. A multilevel study aimed at predicting this variable is not available yet. Such a study would be really interesting.

**Commentato [r2]:** Per Dani: Critiche a Inglehart: Vedi se inserirle o no  
 Davis e Davenport (1999) hanno evidenziato che la distribuzione delle seconde opzioni scelte dagli intervistati tende ad avvicinarsi «pericolosamente» alle distribuzioni casuali e che le classificazioni degli intervistati dipendono dall'ordine con cui vengono presentati i quattro item: è probabilmente questa la ragione per cui la batteria è poco predittiva di un ampio insieme di atteggiamenti e comportamenti teoricamente legati ai valori. D'altro canto, Clarke e colleghi (1999) hanno evidenziato che le risposte agli item di Inglehart sono pericolosamente influenzate dalla situazione economica dominante al momento della rilevazione, mostrando come sia plausibile che il passaggio dal materialismo al postmaterialismo possa essere principalmente considerato un artefatto metodologico dovuto al fatto che nelle società occidentali l'inflazione è stata sostituita dalla disoccupazione come fondamentale preoccupazione materialista. Forme parallele dello strumento in cui si è sostituita la paura per l'inflazione con quella per la disoccupazione hanno in effetti evidenziato minime variazioni nella distribuzione dei valori fra gli anni '70 e gli anni '90.

Clarke, H.D., Kornberg, A., McIntyre, C., Bauer-Kaase, P. e Kaase, M. 1999. *The Effect of Economic Priorities on the Measurement of Value Change: New Experimental Evidence*, in «American Political Science Review», 93, pp. 637-647.

Davis, D.W. e Davenport, C. 1999. *Assessing the Validity of the Postmaterialism Index*, in «American Political Science Review», 93, pp. 649-664.

**Dani:** io non aggiungerei molto altro

Even before performing such new research, however, we believe that this research helped the scientific community to improve its knowledge on the origins of fear of crime, showing new links between stable individual variables and the social characteristics of the contexts people live in.

References

- Amerio, P., & Roccato, M. (2005). A predictive model for psychological reactions to crime in Italy: An analysis of fear of crime and concern about crime as a social problem. *Journal of Community and Applied Social Psychology, 15*(1), 17-28.
- Anderson, D. (1999). The aggregate burden of crime. *Journal of Law and Economics, 42*(2), 611-642.
- Austin, D. M., Woolever, C., & Baba, Y. (1994). Crime and safety-related concerns in a small community. *American Journal of Criminal Justice, 19*(1), 79-97.
- Barni, D., Vieno, A., Rosnati, R., Roccato, M., & Scabini, E. (2014). Multiple sources of adolescents' conservative values: A multilevel study. *European Journal of Developmental Psychology, 11*(4), 433-446.
- Boehnke, K., & Schwartz, S. H. (1997). Fear of war: Relations to values, gender, and mental health in Germany and Israel. *Peace and Conflict: Journal of Peace Psychology, 3*(2), 149-165.
- Boehnke, K., Stromberg, C., Regmi, M. P., Richmond, B. O., & Chandra, S. (1998). Reflecting the world "out there": A cross-cultural perspective on worries, values and well-being. *Journal of Social and Clinical Psychology, 17*(2), 227-247.
- Boer, D., & Fischer, R. (2013). How and when do personal values guide our attitudes and sociality? Explaining cross-cultural variability in attitude-value linkages. *Psychological Bulletin, 139*(5), 1113-1147.
- Dobewall, E., & Rudnev, M. (2014). Common and unique features of Schwartz's and Inglehart's value theories at the country and individual levels. *Cross-Cultural Research, 48*(1), 45-77.
- Dolan, P., & Peasgood, T. (2007). Estimating the economic and social costs of the fear of crime. *British Journal of Criminology, 47*(1), 121-132.

- Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 33, pp. 41-113). San Diego, CA: Academic Press.
- Dupéré, V., & Perkins, D. D. (2007). Block types and mental health: An ecological study of local environmental stress and coping. *American Journal of Community Psychology*, 39(1-2), 107-119.
- Enders, C. K., & Tofighi, D. (2007). Centering predictor variables in cross-sectional multilevel models: A new look at an old issue. *Psychological Methods*, 12(2), 121-138.
- Fattah, E. A. (1993). Research on fear of crime: Some common conceptual and measurement problems. In W. Bilsky, C. Pfeiffer, & P. Wetzels (Eds.), *Fear of crime and criminal victimization* (pp. 139-157). Stuttgart: Ferdinand Enke Verlag.
- Ferraro, K. F. (1995). *Fear of crime: Interpreting victimization risk*. Albany, NY: State University of New York Press.
- Fitzgerald, R. (2008). Fear of crime and the neighborhood context in the Canadian cities. *Canadian Centre for Justice Statistics*, Research paper no. 85-561-M-No. 013.
- Flatley, J., Kershaw, C., Smith, K., Chaplin, R., & Moon, D. (Eds.), (2010). Crime in England and Wales 2009/10. Home Office Statistical Bulletin 12/10 London: Home Office. Retrieved April 22, 2010 from [www.homeoffice.gov.uk/publications/science-research-statistics/research-statistics/crime-research/hosb1210/](http://www.homeoffice.gov.uk/publications/science-research-statistics/research-statistics/crime-research/hosb1210/)
- Hale, C. (1996). Fear of crime: A review of the literature. *International Review of Victimology*, 4(2), 79-150.
- Hitlin, S., & Piliavin, J. A. (2004). Values: Reviving a dormant concept. *Annual Review of Sociology*, 30(1), 359-393.

- Hofmann, D. A., & Gavin, M. B. (1998). Centering decisions in hierarchical linear models: Theoretical and methodological implications for organizational science. *Journal of Management*, 24(5), 623-641.
- Hummelsheim, D., Hirtenlehner, H., Jackson, J., & Oberwittler, D. (2011). Social insecurities and fear of crime: A cross-national study on the impact of welfare state policies on crime-related anxieties. *European Sociological Review*, 27(3), 327-345.
- Inglehart, R. (1990). *Culture shift in advanced industrial societies*. Princeton, NJ: Princeton University Press.
- Inglehart, R. (2006). Mapping social values. *Comparative Sociology*, 2-3(1), 115-136.
- Jackson, J. (2009). A psychological perspective on vulnerability in the fear of crime. *Psychology, Crime & Law*, 15(4), 365-390.
- Kilgour, L. (2003, July). *Women, outdoor physical activity and fear: Theoretical explorations*. Paper presented at the Leisure Studies Association Annual Conference, Roehampton.
- Killias, M., & Clerici, C. (2000). Different measures of vulnerability in their relation to different dimensions of fear of crime. *British Journal of Criminology*, 40(3), 437-450.
- Lewin, K. (1936). *Principles of topological psychology*. New York, NY: McGraw-Hill.
- Mischel, W. (1968). *Personality and assessment*. New York, NY: Wiley.
- Mondak, J. J., Hibbing, M. V., Canache, D., Seligson, M. A., & Anderson, M. R. (2010). Personality and civic engagement: An integrative framework for the study of trait effects on political behavior. *American Political Science Review*, 104(1), 85-110.
- Pantazis, C. (2000). "Fear of crime", vulnerability and poverty. *British Journal of Criminology*, 40(3), 414-436.
- Raudenbush, S. (1989). "Centering" predictors in multilevel analysis: Choices and consequences. *Multilevel Modelling Newsletter*, 1(2), 10-12.

- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models*. London: Sage.
- Roccatto, M., Russo, S., & Vieno, A. (2011). Perceived community disorder moderates the relation between victimization and fear of crime. *Journal of Community Psychology*, 39(7), 884-888.
- Roccatto, M., Vieno, A., & Russo, S. (2013). Criminal victimisation fosters conservatism among people living in areas with high unemployment rates: A multilevel longitudinal study. *European Journal of Social Psychology*, 43(6), 585-592.
- Roccatto, M., Vieno, A., & Russo, S. (2014). The country's crime rate moderates the relation between authoritarian predispositions and the manifestations of authoritarianism: A multilevel, multinational study. *European Journal of Personality*, 28, 14-24. doi: 10.1002/per.1922
- Rohan, M. (2000). A rose by any name? The value construct. *Personality and Social Psychology Review*, 4(3), 255-277.
- Roman, C., & Chaflin, A. (2008). Fear of walking outdoors: A multilevel ecologic analysis of crime and disorder. *American Journal of Preventive Medicine*, 34(4), 306-312.
- Russo, S., & Roccatto, M. (2009). Values and fear of crime. In E. P. Lamont (Ed.), *Social psychology: New research* (pp. 267-282). New York, NY: Nova.
- Russo, S., Roccatto, M., & Vieno, A. (2011). Predicting perceived risk of crime: A multilevel study. *American Journal of Community Psychology*, 48, 384-394. doi: 10.1007/s10464-010-9386-x
- Russo, S., Roccatto, M., & Vieno, A. (2013). Criminal victimization and crime risk perception: A multilevel longitudinal study. *Social Indicators Research*, 112(3), 535-548.
- Schwartz, S. H. (1977). Normative influences on altruism. *Advances in Experimental Social Psychology*, 10, 221-279. Doi: 10.1016/S0065-2601(08)60358-5

- Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1-65). New York, NY: Academic Press.
- Schwartz, S. H. (2003). *A proposal for measuring value orientations across nations*. <http://www.europeansocialsurvey.org/>
- Schwartz, S. H. (2006). Basic human values: Theory, measurement, and applications. *Revue Francaise de Sociologie*, 42(4), 249-288.
- Schwartz, S. H. (2012). An overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture*, 2(1). <http://dx.doi.org/10.9707/2307-0919.1116>
- Schwartz, S. H., Sagiv, L., & Boehnke, K. (2000). Worries and values. *Journal of Personality*, 68(2), 309-346.
- Shotland, R. L., Hayward, S. C., Young, C., Signorella, M. L., Mindingall, K., Kennedy, J. K., Rovine, M. J., & Danowitz, E. F. (1979). Fear of crime in residential communities. *Criminology*, 17(1), 34-45.
- Skogan, W. G., & Maxfield, M. G. (1981). *Coping with crime*. Beverly Hills, CA: Sage.
- Stafford, M., Chandola, T., & Marmot, M. (2007). Association between fear of crime and mental health and physical functioning. *American Journal of Public Health*, 97(11), 2076-2081.
- Stenner, K. (2005). *The authoritarian dynamic*. New York, NY: Cambridge University Press.
- Taylor, R. B., & Hale, M. (1986). Testing alternative models of fear of crime. *Journal of Criminal Law and Criminology*, 77(1), 151-189.
- Valera, S., & Guàrdia, J. (2014). Perceived insecurity and fear of crime in a city with low-crime rates. *Journal of Environmental Psychology*, 38, 195-205. Doi: 10.1016/j.jenvp.2014.02.002

- Van der Wurff, A., Van Staalduinen, L., & Stringer, P. (1989). Fear of crime in residential environments: Testing a social psychological model. *Journal of Social Psychology, 129*(2), 141-160.
- Verplanken, B., & Holland, R. W. (2002). Motivated decision making: Effects of activation and self-centrality of values on choices and behavior. *Journal of Personality and Social Psychology, 82*(3), 434-447.
- Vieno, A., Roccato, M., & Russo, S. (2013). Is fear of crime mainly social and economic insecurity in disguise? A multilevel multinational analysis. *Journal of Community & Applied Social Psychology, 23*(6), 519-535.
- Vitelli, R., & Endler, N. S. (1993). Psychological determinants of fear of crime: A comparison of general and situational prediction models. *Personality and Individual Differences, 14*(1), 77-85.

Table 1.

*Between Individual and Country Level Variables: Descriptive Statistics and Correlations*

	1	2	3	4	5	6	7	8	9	Mean	SD	Min	Max
<u>Individual level</u>													
1. Male	-									0.46	0.50	0	1
2. Age	-.05**	-								47.55	18.81	15	99
3. Victimization	.10*	-.08**								0.17	0.37	0	1
4. Education	.04**	-.25**	.11**	-						11.94	4.20	0	22
5. City dimension	-.02**	-.05**	.06**	.12**	-					0.36	0.48	0	1
6. Conservation	-.08**	.19**	-.07**	-.17**	.01	-				4.42	0.85	1	6
7. Openness to change	.10**	-.37**	.07**	.19**	.09**	.06**	-			4.04	0.94	1	6
8. Self-enhancement	.09**	-.23**	-.01	.06**	.11**	.28**	.55**	-		3.73	1.05	1	6
9. Self-transcendence	.09**	.02**	.02**	.09**	.03**	.52**	.32**	.22**	-	4.83	0.72	1	6
10. Fear of crime	-.19**	.06**	.19**	-.04**	.13**	.12**	-.07**	.01	.01	1.95	0.69	1	4
<u>Country level</u>													
1. Crime rate	-									4779.99	3256.33	930.10	15185.54
2. Unemployment	-.17	-								6.79	2.22	2.60	11.30
3. Uncertainty avoidance	-.31	.29	-							70.33	22.67	23.00	100.00

Note. \*  $p < .05$ ; \*\*  $p < .01$ .

Table 2.

*Multilevel Correlates of Fear of Crime*

	<i>Unconditional Model</i>		<i>Model 1</i>		<i>Model 2</i>	
	Coef. (SE)	<i>t</i>	Coef. (SE)	<i>t</i>	Coef. (SE)	<i>t</i>
Intercept	1.93** (.04)	48.24	1.89** (.05)	40.83	1.89** (.05)	36.98
<u>Individual Level</u>						
Male			-.23** (.01)	-19.19	-.23** (.01)	-19.14
Age			.01* (.01)	1.96	.01* (.01)	1.96
Victimization			.37** (.03)	13.03	.36** (.03)	13.02
Education			-.01 (.01)	-0.48	-.01 (.01)	-0.45
City dimension			.16** (.03)	6.22	.16** (.03)	6.23
Conservation			.10** (.01)	9.56	.10** (.01)	10.19
Openness to change			-.03** (.01)	-4.71	-.03** (.01)	-6.40
Self-enhancement			.01 (.01)	1.45	.01 (.01)	1.52
Self-transcendence			-.05** (.01)	-6.01	-.05** (.01)	-5.99
<u>Country Level</u>						
$(\beta_{0j})$						
Crime rate					-.01 (.01)	-0.44
Unemployment					.02 (.02)	1.05
Uncertainty avoidance					.02 (.01)	1.65
<u>Country Level</u>						
$(\beta_{6j})$						
Crime rate					.01* (.01)	2.06
Unemployment					-.01 (.01)	-0.74
Avoidance					-.01 (.01)	-0.86
<u>Country Level</u>						
$(\beta_{7j})$						
Crime rate					-.01** (.01)	-3.79
Unemployment					.01 (.01)	0.58
Uncertainty avoidance					-.01 (.01)	-0.92
<u>Country Level</u>						
$(\beta_{8j})$						
Crime rate					.01** (.01)	4.03
Unemployment					.01 (.01)	0.59
Uncertainty avoidance					.01 (.01)	0.59
<u>Country Level</u>						
$(\beta_{9j})$						
Crime rate					-.01 (.01)	-0.14
Unemployment					-.01 (.01)	-0.60
Uncertainty avoidance					-.01 (.01)	-0.18

Values, crime rate, and fear of crime 30

<i>Variance components</i>			
Within Country	0.433	.386	.386
Between Country		.039	.039
$\beta_{0j}$	0.045		
$\chi^2$	5069.64**	4827.08**	4136.62**
Between country		.002	.002
$\beta_{6j}$			
$\chi^2$		173.19**	142.72**
Between country		.001	.001
$\beta_{7j}$			
$\chi^2$		77.51**	47.71**
Between country		.002	.001
$\beta_{8j}$			
$\chi^2$		116.13**	65.52**
Between country		.001	.001
$\beta_{9j}$			
$\chi^2$		64.73**	63.57**

Note. \*  $p < .05$ ; \*\*  $p < .01$ .

Figure captions.

*Figure 1.* Effect Exerted on Fear of Crime by the Cross-level Interaction between Conservation (Individual Level) and Crime Rate (Country Level)

*Figure 2.* Effect Exerted on Fear of Crime by the Cross-level Interaction between Self-Enhancement (Individual Level) and Crime Rate (Country Level)

*Figure 3.* Effect Exerted on Fear of Crime by the Cross-level Interaction between Openness to change (Individual Level) and Crime Rate (Country Level)

Figure 1

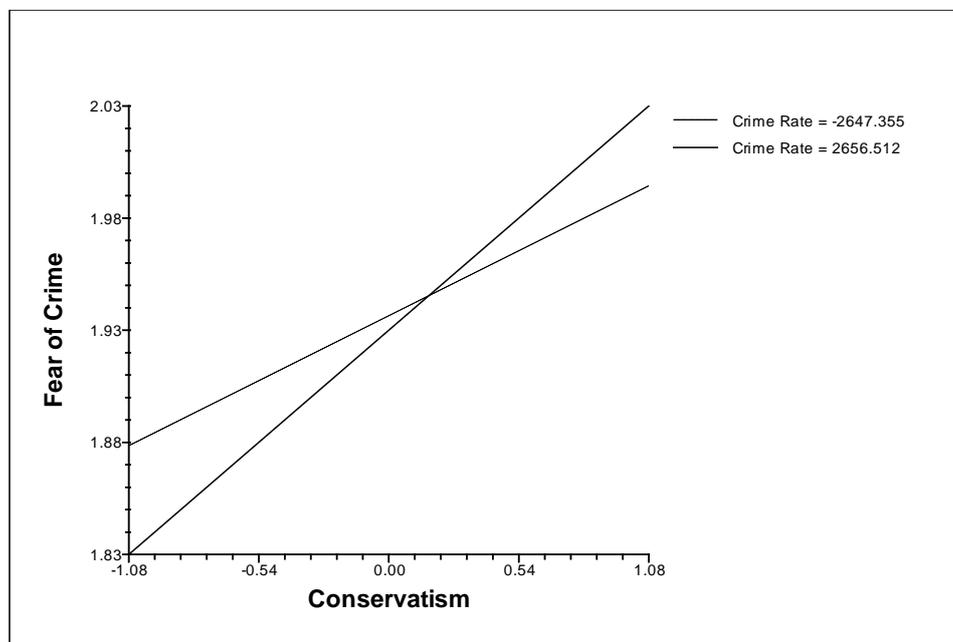


Figure 2

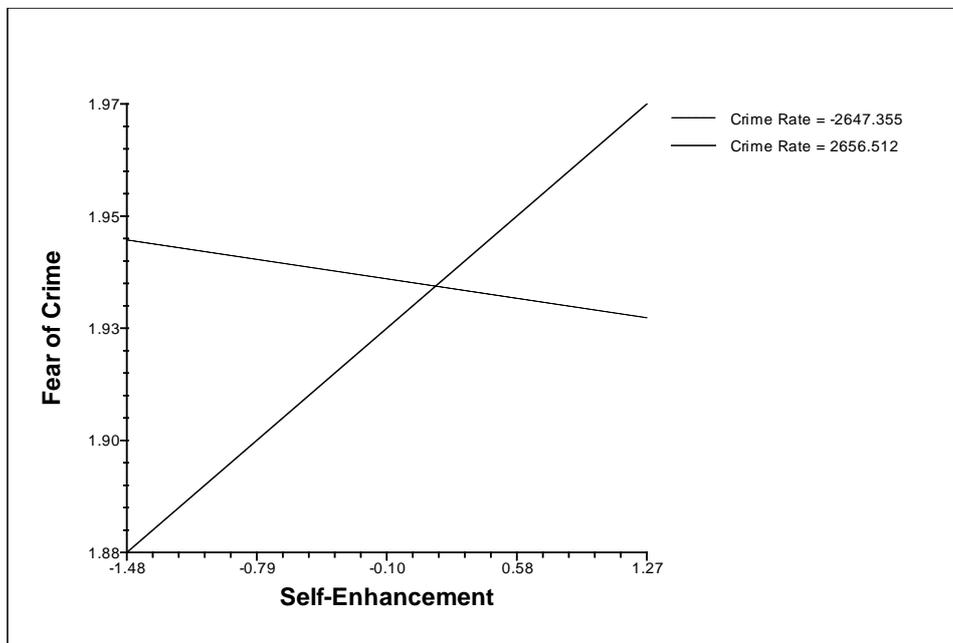


Figure 3

