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Broadening the Knowledge on Autonomy and Conflict Outside Romantic Relationships: The Relationship Between Autonomy, Conflict Strategies, Growth Motivation, and Use of Core Concerns

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Abstract

The aim of the current study is to broaden our understanding of conflicts and their relationship with autonomy in several different directions. In particular, this study strives to: confirm previous findings outside the domain of romantic relationships, address the notion of autonomy as growth motivation, and tie current findings to five core concerns—technique aimed at maintaining good relationships during conflicts and negotiations. Hundred and one participants completed an online survey measuring their autonomy and response to conflicts. The findings suggest that the relationship between autonomy and conflict strategies is not limited to romantic relationships. Generally, autonomous individuals are more likely to engage in active coping strategies while less autonomous individuals tend to avoid conflict. Autonomous functioning was related to higher use of core concerns during conflicts. No conclusive evidence was found for the notion of autonomy as growth motivation.

Keywords: self-determination, autonomy, conflict strategies, growth motivation, conflict avoidance, implicit beliefs, core concerns

Introduction

Conflicts are an inevitable part of the human experience. If not handled with care they have the potential to disrupt relationships, cause negative emotions and escalate into violence. Understandably, the topic is widely addressed in the research community. Over the years many different typologies and approaches to the study of conflict emerged. For example, Jehn and Mannix (2001) classify conflict based on the underlying cause of disagreement: relationship, task or process. Rahim and Bonoma (1979) divide conflict depending on the number and membership of the individuals involved into intrapersonal, interpersonal, intragroup, intergroup and interorganisational. Some approaches choose to focus on a certain aspect of conflict such as the interpersonal conflict theory (Hammond, 1965) which concentrates on the cognitive aspect of conflict rather than motivation and emotion behind it. Others aim to study the consequences of conflict in a particular setting such as family or organisation.

A variety of preferred methodological approaches and tools emerged alongside the different frameworks making comparisons between studies from different approaches difficult. As such, it is important to define the framework of the current study early on. This study aims to focus on the individual differences in response to interpersonal conflict using the framework of Deci and Ryan's self-determination theory (1980, 1985a).

Self-determination theory

Self-determination theory (SDT) presents a framework for the study of personality and motivation behind human actions. The theory is based on the assumption that all humans are naturally active organisms with tendencies toward development, growth, mastering ambient challenges, and integrating new experiences into a coherent sense of self. The proper functioning

of these processes requires ongoing support from the social environment in the form of basic psychological needs: autonomy, competence and relatedness (for more information see Deci and Ryan 1985a, 2000).

The degree to which individual functioning is freely chosen, integrated and endorsed by the self can be represented on the autonomy continuum. The low autonomy end of the continuum is represented by externally regulated behaviour. Ryan, Legate, Niemiec, and Deci (2012) describe external regulation as characterized by seeking external rewards and avoiding punishments. As these actions are not integrated into the self, the behaviours cease once the external controls are no longer present. By the process of internalization external regulation can be integrated into the true self to a varying degree (Ryan and Connell, 1989). Introjected regulation represents regulation that have been partially internalized. In case of introjected regulation, an individual engages in behaviours to avoid punishments or gain rewards that originate within the person. An example is engaging in a behaviour in order to raise one's self-esteem or to avoid feelings of guilt and shame. Next step on the regulation continuum is identified regulation. Identified regulation is more self-reflective and expressive as it involves valuing and acceptance of the behaviour as being important to one's identity. Identifying with the value of the behaviour leads to feelings of responsibility for the enactment and a sense of volition in one's actions. That is why identified regulations is considered relatively high in autonomy. The most autonomous form of extrinsic motivation is integration. When a behaviour is integrally regulated a person is not only identified with the importance of the behaviour but also accepts it as an integral part of his/her values. Finally, behaviours that are intrinsically motivated are regulated by the true self. Such actions are performed for the pleasantness and joy they elicit. They are not means to achieve an end but rather are a goal in themselves. Deci (1975) proposed that intrinsic motivation is the prototype of autonomy as intrinsically motivated behaviours are

performed spontaneously and in accordance to the person's inner interests. For a more thorough review of the SDT see Deci and Ryan (2000, 2008, 2012)

Knee, Hadden, Porter and Rodriguez (2013) identify the ability to distinguish behaviours based on the degree of autonomy as one of the SDT's greatest contributions. The same action can be driven by different regulatory processes, for example a person can agree to go see a movie with a friend because he/she enjoys watching movies or he/she wants to avoid an unnecessary argument. Even though the action is the same, the first example is more autonomous than the second. The varying degree of autonomy can explain different consequences of a seemingly identical behaviour. Research indicates that autonomous functioning has a number of positive outcomes including, but not limited to, greater well being, happiness and vitality (e.g. Olesen, Thomsen & O'Toole 2015, Demir, Özdemir & Marum, 2011, Niemiec, Ryan, Patrick, Deci & Williams 2010). Autonomy has also been linked to a variety of task specific benefits such as better grades (e.g.. Black & Deci. 2000), higher engagement in prosocial behaviour (Gagne', 2003), higher productivity and lower risk of burnout at work (e.g., Femet, Guay & Senecal, 2004), greater engagement in sports and physical activities (e.g. Owen, Astell-Burt & Lonsdale, 2013), higher engagement and better outcomes of psychotherapy (Zuroff et al., 2007), etc.

Self-determination and conflict

The positive consequences of autonomous functioning have been replicated within the field of interpersonal behaviour. For example, autonomous individual have been found to have more honest and satisfying interactions with family members and friends (Hodgins, Koestner, & Duncan, 1996). Hodgins, Liebeskind and Schwartz (1996) studied autonomy in perpetrators accounting for face-threatening social predicaments. The study found that autonomous individuals are more likely to focus on mitigating damage done to the other party rather than try

to save their own face. Autonomous participants were also less likely to try to reduce blame through lies and deception. A later study on facing social predicament by Hodgins and Liebeskin (2003) found autonomous functioning associated with less interpersonal defensiveness. In particular, autonomous individuals engaged in a smaller amount and less complex defensive behaviours while accounting. Furthermore, when autonomous individuals become defensive they tend to withdraw rather than attack the victim.

The first to use the SDT framework to investigate conflicts were Knee, Patrick, Vietor, Nanayakkara and Neighbors (2002). The study explored the effect of autonomous orientation when reacting to artificially stimulated conflict in 61 heterosexual couples. Knee et al. (2002) used semi-structured videotaped interviews intended to stimulate situations resembling naturally occurring conflicts in romantic relationships. At first, the partners were interviewed separately to gather information about the relationship. The interviews were compared to identify any differences in the couple's' perception of the relationship. The couples were then brought together and asked to discuss the differences in their individual interviews and come to mutual conclusions. The study found that partners high in autonomy experienced less negative emotions in reaction to the stimulated conflict. In particular, low autonomy individuals reported a higher increase in depressive emotions (such as sadness and loss) and hostility after the stimulated conflict. High autonomy was associated with lower rise in hostility, but only for male participants. According to Knee et al. (2002) not only do autonomous individuals react to conflicts with less negative emotions, they also employ different coping strategies to deal with them. Autonomously oriented partners reported to be more likely to engage in active strategies such as planning, seeking emotional support and attempting to understand and repair emotions. Low autonomy partners were more likely to engage in avoidance, denial and emotional venting. The participants' behaviour during the interview was video recorded and scored. High autonomy was

correlated with more positive behaviours, however, autonomy had no effect on the amount of negative behaviours exhibited.

Building on the findings of Knee et al. (2002), Knee, Lonsbary, Canevello and Patrick (2005) conducted four studies to explain the role of autonomy in conflict between romantic partners. The studies aimed to broaden the previous findings by looking at laboratory induced conflicts as well as naturally occurring ones, trait autonomy as well as relationship specific autonomy, and autonomy effect on the individual as well as on the romantic partner. In the first study higher trait autonomy predicted higher relationship specific autonomy which in turn predicted higher relationship satisfaction after conflict. In the second study autonomous functioning was associated with less defensiveness and more attempts to understand one's partner which in turn led to higher relationship satisfaction after the conflict. In particular, trait autonomy lead to less defensive responses to conflict and relationship autonomy lead to both more attempts to understand the partner and the conflict and less defensiveness. In their third study Knee et al. (2005) showed that feeling autonomous in the relationship has benefits not only for oneself but also for one's partner. The final study was the only one that did not rely on self-reported data, but rather replicated the methodology of videotaped interviews used by Knee et al. (2002). The study supported the hypothesis that actor and partner relationship autonomy predicts both reported and observed responses during a staged conflict.

SDT has been successfully applied to wide range of contexts including education, health care, organisations, psychotherapy, sports, etc. It is therefore surprising that the framework has not been applied to the study of conflicts outside close relationships. The aim of the current study is to broaden the findings of Knee et al. (2002) and Knee et al. (2005). In particular the study strives to investigate whether the findings that high autonomous motivation is connected to better coping with conflict can be generalised outside romantic relationships. Rather than concentrating

on conflict between spouses the study aims to investigate response to any conflict encountered in everyday life.

Conceptualisation of autonomy

Within the SDT research autonomy can be conceptualised in a variety of ways. A basic distinction can be drawn between environmental and personal level of autonomy. Environmental measure of autonomy is concerned with the degree a social environment allows individuals to function in an autonomous fashion. Social environment and events can be autonomy supportive or thwarting through the use of punishment, promise of reward, opportunity for choice, imposition of deadline etc. Environmental autonomy can be assessed with event, relationship or climate specific measures such as the Perceived Parental Autonomy Support Scale (Weinstein et al., 2012) and Perceived Autonomy Support Scale for Exercise Settings (Hagger et al., 2007). The two most common operationalizations of person-level of autonomy are causality orientations and trait autonomy. Causality orientation refers to the individual differences in understanding of causes behind their actions. Deci and Ryan (1985b) identified three types of causality orientations: autonomy, control and impersonal. Autonomously oriented individuals experience a high degree of choice when initiating their actions. They regulate their actions based on their interests and self-endorsed values. Control oriented individuals regulate their actions according to external or internalized controls, that is, they engage in behaviours because they feel like they “have to” or “should”. Impersonal orientation is characterized by sense of amotivation. Impersonally oriented individual often feel their actions are beyond their control and feel incompetent and despondent. Causality orientation can be measured by the General Causality Orientations Scale (Deci and Ryan, 1985b) or one of its event specific versions. The study by Knee et al. (2002) used GCOS to measure autonomy.

Trait autonomy, sometimes referred to as autonomous functioning or self-determination, corresponds to person's placement on the autonomy continuum described earlier in the text. In the literature the autonomy continuum is referred to by different names including high/low autonomy, high/low self-determination, autonomy-control and autonomy-heteronomy continuum. Trait autonomy can be measured by the Self-Determination Scale (SDS; Sheldon, Ryan, & Reis, 1996), which was used in the Knee et al.'s (2005) study of autonomy and conflict. According to Deci and Ryan, (1985b) prototypes of the three causality orientations (autonomous, controlled and impersonal) roughly correspond to high, medium and low autonomy. The current study uses trait autonomy (with high and low autonomy as the ends of its continuum) measured by the SDS. The particular scale was chosen for its simplicity, measurement of a singular concept and relatedness to the remaining scales.

Autonomy as growth motivation

Knee et al. (2002) found that autonomous individuals react to conflict with their romantic partner with less negative emotion and more active coping strategies. They explain their findings by proposing that in romantic relationships autonomy can manifest itself as "growth motivation". They hypothesised that this drive for growth and development leads to perception of conflicts and differences in opinions as opportunities for learning rather than threats to one's ego. Growth motivated individuals are therefore more likely to acknowledge problems rather than avoid them. Autonomous functioning has been connected to several concepts related to growth motivation, specifically, lower defensiveness, lower use of self-serving bias, and mastery orientation (Hodgins and Liebeskin, 2003; Knee & Zuckerman, 1996; Cerasoli and Ford, 2014). For a more in-depth review on autonomous functioning and growth see Hodgins and Knee's (2002) chapter on integrating self and conscious experience.

While Knee et al. (2002) operationalise autonomy as growth motivation, the study measured autonomy only in the form of motivational orientation; no other indicators of growth motivation were used. This study addresses the notion of autonomy as growth motivation by investigating two concepts related to growth motivation: conflict avoidance and implicit theory of growth.

In order to explain and understand the world around them, humans develop their own lay theories and beliefs. Implicit theories address individual's beliefs about the consistency of human nature (Ross, 1989). Burnette, O'Boyle, VanEpps, Pollack, and Finkel (2013) describe implicit theories as schematic knowledge structures that incorporate beliefs about the stability of a particular attribute (intelligence, personality traits, abilities etc.) and the conditions under which such attribute could change. These beliefs are often divided into two general categories: growth and destiny beliefs (also referred to as incremental and entity beliefs). Growth beliefs suppose that human traits and attributes can be changed over time either by individual's effort or by environmental influences: people can grow, develop, transform and become different from their past self. Destiny beliefs reflect the conviction that human nature is, for the most part, constant. Destiny theorists are more likely to make strong trait inferences when presented with brief description of behaviour (Erdley & Dweck, 1993). They tend to rely on stereotypes when interpreting the behaviour of others (Levy & Dweck, 1998; Levy, Stroessner & Dweck, 1998) and use traits as main guidance when making behavioural predictions (Chiu, Hong & Dweck, 1997). Implicit theories guide the perceptions of others as well as our own actions. For example, holding destiny beliefs about intelligence has been linked with negative academic behaviours such as self handicapping and procrastination (Howell & Buro, 2009; Meras & Witkow, 2014).

This study chose implicit theories of growth as an indicator of growth motivation for two reasons. Firstly, studies concerning autonomy and implicit theories have reported similar effects

of the two constructs. For example, Knee (1998) investigated the effect of implicit theories towards romantic relationships. People with destiny beliefs thought that a partner fit was a fixed variable and consequently two people were either “meant to” be together or not. On the other hand, people with growth beliefs thought that successful relationships have to be cultivated and developed over time. Knee (1998) found that when faced with relationship stressors (such as arguments and conflicts) people with growth beliefs were more likely to exhibit relationship maintaining coping strategies. On the other hand, destiny beliefs predicted endorsement of disengagement strategies. Knee, Nanayakkara, Vietor, Neighbors & Patrick (2001) found that discrepancy between ideal and actual romantic partner was linked to lower satisfaction with the relationship. One exception were people with high growth and low destiny beliefs, for whom this effect was significantly lower. Autonomous functioning is connected to a lower tendency to view an ideal partner as a function of one’s view of self (Knee et al., 2002).

Secondly, if autonomous, or growth motivated, individuals strive towards growth and development and tend to see challenges, such as conflicts as opportunities for learning, they should believe that such learning and development is possible. In other words they should have growth rather than destiny beliefs about the human nature.

Conflict avoidance facet of the General and Specific Avoidance Questionnaire (GSAQ - Stemmet, Roger, Kuntz, & Borrill, 2014) will be used to test Knee et al.'s (2002) hypothesis that autonomy manifest itself as growth motivation.

Measuring conflict strategies

In order to assess how individuals deal with conflicts Knee et al. (2002) used behavioural coding and a measure of coping strategies (COPE Carver, Scheier, & Weintraub, 1989). Knee et al.'s (2005) study used their own scale for understanding vs. defensive response to conflict. In

order to compare the results of the current study with previous literature this study uses a brief version of COPE (Carver, 1997) to measure conflict strategies. However, the COPE questionnaires was originally constructed to measure coping strategies with any stressful situation, not just conflicts. It was adjusted to measure conflict strategies by altering the instructions, directing participants to rate how likely they are to use given strategies during conflicts, rather than any stressful events. As such, the measure does not address specific strategies in conflict management. For example, participants are asked to indicate how likely they are to try to come up with a strategy, but the measure does not address what kind of strategy the participants plans to use. An argument might turn out quite differently if your strategy is to keep an open mind or punch anyone that disagrees with you. In order to understand why exactly autonomous individual benefit from greater satisfaction and happiness after conflict a more conflict specific approach is necessary.

That is one of the reasons for including the core concerns framework in this study. According to its founders, Fisher and Shapiro (2006), the core concerns framework is a model used to address the emotional dimension of negotiation and avoid conflict escalation. According to the framework attending to the five core concerns: appreciation, autonomy, affiliation, status, and role during negotiations and conflicts stimulates positive emotions and collaboration. The core concerns technique provides simple step by step instructions on how to asses the status of your and your opponent's core concerns, address them, and achieve your goal while building a good relationship. The framework is taught as part of the Program on Negotiation at Harvard Law School and has been used by the authors in several international negotiations. The framework is based, among others, on self-determination theory. This becomes apparent upon a close inspection of the five core concerns which bear close resemblance to the three basic psychological needs (autonomy, competence and relatedness) in SDT. For example, core concern

of affiliation—the desire to feel connected to others on a personal level and to be a part of the group—is closely related to SDT relatedness need which Moller, Deci and Elliot (2010) describe as the need for trust, intimacy, connectedness and positive interpersonal interactions.

Connection between trait autonomy and basic psychological needs has been made by a number of studies primarily in educational and organisational context. Receiving support for one's basic needs by an authority figure such as parent, teacher or coach leads to more autonomous motivation towards learning and sports (e.g. Gagne', Ryan & Bargmann, 2003; Katz, Kaplan & Gueta, 2010; Perlman, 2015). In turn autonomous motivation amongst parents, teachers and coaches appears to contribute to more need supportive approach to parenting and teaching. For example, Roth, Assor, Kanat-Maymon and Kaplan (2007) found that students of autonomously motivated teachers report receiving more autonomy support and are more autonomously motivated to learn. Recently, these findings have been replicated in more egalitarian relationships. In three methodologically varied studies Hadden, Rodriguez, Knee and Porter (2015) provide evidence that autonomous motivation towards a romantic relationship leads to greater support of one's partner. In particular, high relationship autonomy was related to higher availability, encouragement, responsiveness, lower intrusiveness, and overall as well as specific basic need support.

Since autonomous individuals are expected to be more need supportive towards others and due to the similarity between the basic psychological needs of SDT and the five core concerns, I predict a positive relationship between autonomy and the use of core concerns. In particular, autonomous individuals are expected to be more likely to address their own, as well as their opponent's, core concerns during conflicts and confrontations.

Hypotheses

1. As self determination theory has been previously applied to many contexts, the findings of Knee et al. (2002) and (2005) should be generalisable outside the romantic relationship sphere: highly autonomous individuals should be more likely to use active coping strategies during a conflict.
2. Knee et al. (2002) explain their finding by positing that autonomous motivation manifests as growth motivation, but do not further examine this claim. This study investigates the relationship between trait autonomy and indicators of growth motivation: implicit theories of growth and conflict avoidance. High autonomy is expected to be correlated with low conflict avoidance, high growth beliefs and low destiny beliefs.
3. High autonomy individuals are expected to show greater regards for their own and their opponents core concerns during a conflict.

Methods

Participants

A convenience sample of 114 participants was recruited by posts in social media such as the Facebook's Social Science Research Group. The data of 11 participants was discarded as they terminated the survey before completion. 59 of the participants were male, 43 female and one identified as other. The participants' age ranged from 18 to 76 with a mean of 28.23 ($SD = 10.48$). Participants were from 23 different countries, with 86% of the participants from Europe. Best represented were Sweden (with 31 participants), Slovakia (18) and Great Britain (10).

Design

The aim of the study is to establish the existence of a relationship between autonomy and coping strategies, implicit theories, conflict avoidance and use of core concerns. As there are no prior studies confirming this relationship in a non-romantic context, a simple correlational design was selected for the study. Six variables were measured in total: trait autonomy, coping strategies, conflict avoidance, use of core concerns, implicit theories of growth and destiny.

Materials

Trait autonomy — The study used the same scale as Knee et al. (2005) – the Self-Determination Scale by Sheldon, Ryan, & Reis (SDS; 1996). The SDS captures individual differences in the amount of autonomous functioning in every-day life. The questions address being aware of one's own feelings, sense of self, and having a choice in one's behaviour. Similarly to the Knee et al.'s study (2005), an overall autonomy score was used rather than the two subscales (self-awareness and choice). The scale consists of 10 pairs of statements. An example of a statement pair is: A: "What I do is often not what I would choose to do." versus B: "I am free to do whatever I decide to do." The participants rated which statement feels more true on a 9-point scale ranging from 1 (Only A feels true) to 9 (Only B feels true). The scale's test-retest reliability has been reported as $r = .77$ over 8 weeks. There was no significant relationship between autonomy ($M = 3.74$, $SD = .67$) and any demographic variables (age, gender or nationality). Internal reliability in this study (measured by Cronbach's α using only items used to compute the final score: 3-10) was $\alpha = .76$.

Coping strategies — In order to be able to compare the results with Knee et al.'s study (2002) a COPE questionnaire was used to assess coping strategies during conflict. However, unlike Knee et al. (2002), this study opted for the abbreviated version (Brief COPE; Carver, 1997) in order to

avoid participant exhaustion. Brief COPE consists of 28 questions, two for each coping strategy, while the full version consists of 60 questions. Participants rated how often they engage in a particular coping strategy when faced with conflict or argument on a scale from 1 (I do not do this at all) to 4 (I do this a lot). Internal reliability for the subscales was: substance use $\alpha = .92$, humour $\alpha = .89$, use of emotional support $\alpha = .87$, religion $\alpha = .86$, use of instrumental support $\alpha = .80$, self-blame $\alpha = .80$, positive reframing $\alpha = .76$, planning $\alpha = .75$, behavioural disengagement $\alpha = .66$, active coping $\alpha = .65$, acceptance $\alpha = .65$, denial, $\alpha = .60$, venting, $\alpha = .48$, and self-distraction $\alpha = .38$.

Conflict avoidance — Conflict avoidance was measured using the conflict avoidance facet of the General and Specific Avoidance Questionnaire (GSAQ - Stemmet, Roger, Kuntz, & Borrill, 2014). The subscale addresses individual differences in avoidance of conflict and confrontation. Participants were asked to indicate for each of the nine statements whether they felt they were true or false with respect to how they typically behave when faced with a stressful situation. For example: “In difficult situations with others, I tend to just leave it and walk away.” The total conflict avoidance score was computed by adding all of the points, so that a higher score indicated more conflict avoidance. The mean (SD) of conflict avoidance was 3.29 (2.68). Internal reliability of the scale was $\alpha = .83$ and test-retest reliability was reported as .82 over an average of six weeks.

Core concerns — A new set of questions was designed for the purposes of this study as there are no known scales to measure the use of core concerns in conflict. The questions were based on the descriptions of core concerns and suggestions of how to use them in interpersonal conflict found in Fisher and Shapiro’s (2006) book *Beyond Reason*. The questions were designed to measure the

likelihood of addressing the five core concerns during a conflict. Participants indicated how likely they are to engage in described behaviour on a scale from 1 (Not at all likely) to 5 (Very likely). There were two questions aimed at each of the core concerns. Two questions (7, 9) were reverse scored. See Appendix B for the full questionnaire.

Mean (SD) use of core concerns was 3.48 (.46). The relatively low internal reliability of the scale ($\alpha = .58$) was to be expected considering the scale measures the use of five different core concerns in one score.

Implicit theories — In order to access the implicit beliefs about the stability of human nature I used the implicit person theory measure used in Levy, Stroessner and Dweck (1998). The measure consists of four items concerning destiny beliefs (e.g. “The kind of person someone is, is something basic about them, and it can't be changed very much.”) and four items concerning growth beliefs (e.g. “Everyone, no matter who they are, can significantly change their basic characteristics.”). Participants rated each statement on a scale from 1 (Strongly disagree) to 7 (Strongly agree).

Mean (SD) of destiny beliefs was 3.84 (1.45) and mean (SD) of growth beliefs was 3.89 (1.37). Internal reliability of the two scales was: destiny $\alpha = .90$ and growth $\alpha = .84$. As expected, the two scales were negatively correlated with each other, $r(103) = -.77$ ($p < .001$).

Procedure

A survey was constructed using an online research tool “Psychsurveys.org”. At the beginning of the survey participation were presented with informed consent form. They were informed that their involvement was voluntary, that they were free to discontinue the survey at any time, that their responses were kept confidential and any data would be presented

anonymously.

The survey consisted of basic demographic information and measures of autonomy, avoidance, coping strategies, use of core concerns and implicit theories.

Three participants completed the survey in a pilot study and provided feedback regarding comprehensibility of the questions. They were asked to pay special attention to the core concern questionnaire as it was newly created specifically for the purposes of this study. Based on the feedback the scale for implicit theory measure was reversed to match the remaining scales. The time required for the survey by the pilot participants was 10 to 20 minutes. This information was then included on the consent page.

Results

The overall scores for each variable were computed according to the questionnaires' instructions: autonomy, the use of core concerns and implicit theories about trait stability were computed by averaging, while conflict avoidance and coping strategies were computed by adding the corresponding scores.

The answers to question 1 and 2 in the autonomy questionnaire were missing for most of the participants (91.2 % and 90.4% accordingly). It is unclear what have caused this error. Several of the participants were contacted after the data analysis. Participants reported to have answered all of the questions. However, when the online survey was completed by the researcher all of the answers were recorded correctly. A total self-determination score for those participants that answered all of the corresponding questions was computed using both all ten questions and using only the eight questions for which the data was not missing. The difference between the two total self-determination scores ranged from 0 to 0.45 on a possible 5 point scale. As the

difference was not large, the eight question average was used for all further analyses.

Prior to analysis trait autonomy, coping strategies, conflict avoidance, implicit theories and use of core concerns were examined for accuracy of data entry, missing values, outliers and fit between their distributions and the assumptions of multivariate analysis.

Seven of the recorded variables displayed cases of missing data. As the amount of missing data for each variable was less than 2%, the missing cases were excluded from analyses. Within the coping strategies, denial, use of religion and substance use were all positively skewed, suggesting that these strategies are not widely used when dealing with conflict. Logarithmic transformations improved their normality: Denial from skewedness of 1.30 and kurtosis of .98 to .79 and -.68 respectively; religion from skewedness of 1.28 and kurtosis of .59 to .79 and -.8; substance use from skewedness of 1.64 and kurtosis of 2.38 to .95 and -.23. No substantial univariate or multivariate (using $p = .001$) outliers were detected.

The participants were split around median (3.88) into low and high autonomy groups. Multiple independent sample t-tests were used to explore the difference in coping strategies with conflict between high and low autonomy groups. Fourteen independent sample t-tests were chosen over one MANOVA to allow for a straightforward interpretation of the results. In order to avoid type 1 error due to the high number of tests the significance threshold was adjusted using the Dunn-Sidak method to $\alpha = .004$. The analysis found significant differences in the use of behavioural disengagement, denial, planning, self-blame and use of emotional support (see Table 1). The analysis also found a marginal difference in substance use. Participants with high autonomy were more likely to engage in planning and positive reframing, and use emotional and instrumental support when faced with conflicts. The low autonomy group was more likely to engage in behavioural disengagement, denial, self-blame and substance use. There was no significant difference between low and high autonomy group in the use of acceptance, active

coping, humour, positive reframing, religion, self-distraction, use of instrumental support or venting.

Table 1. Independent sample t-test for the use of coping strategies between low and high autonomy groups. Means and standard deviations of coping strategies divided into low and high autonomy groups. For better comparability all means and SD are presented from untransformed data.

	Low autonomy		High autonomy		<i>t</i>	<i>p</i>	95% CI	Cohen's <i>d</i>
	Mean	SD	Mean	SD				
Acceptance	5.98	1.19	6.42	1.45	2.77	0.099	[-0.95, 0.08]	-0.33
Active coping	5.84	1.32	6.25	1.38	2.36	0.127	[-.928, 0.12]	-0.31
Beh. disengagement	3.76	1.21	2.89	1.01	15.92	< 0.001	[0.44, 1.31]	0.74
Denial	3.38	1.35	2.57	1.08	13.48	< 0.001	[0.12, 0.40]	0.66
Humour	4.92	2.04	5.30	1.88	0.98	0.325	[-1.15, 0.38]	-0.19
Planning	5.74	1.31	6.58	1.37	10.29	0.002	[-1.37, -0.32]	-0.62
Positive reframing	5.28	1.60	5.81	1.67	2.74	0.101	[-1.17, .011]	-0.33
Religion	3.48	1.91	3.17	1.71	0.79	0.376	[-0.10, 0.27]	0.17
Self-blame	6.08	1.38	5.90	1.76	9.94	0.002	[0.37, 1.61]	1.08
Self-distraction	5.86	1.29	5.60	1.5	0.86	0.356	[-0.29, 0.81]	0.19
Substance use	3.46	1.81	2.62	0.99	7.68	0.007	[0.06, 0.37]	0.58
Emotional support	4.94	1.60	6.02	1.74	10.74	0.001	[-1.73, -0.42]	-0.76
Instrumental support	5.08	1.67	5.70	1.67	3.54	0.063	[-1.27, 0.03]	-0.37
Venting	5.00	1.31	4.60	1.45	2.12	0.149	[-0.14, 0.94]	0.29

Pearson's *r* correlation was used to explore the relationship between autonomy, use of core concerns, conflict avoidance and implicit theories. The analysis found a significant positive relationship between autonomy and the use of core concerns $r(103) = .24, p = .014$. Participants with higher autonomy scores reported to use more core concerns during conflicts. There was a significant negative relationship between autonomy and conflict avoidance $r(103) = -.29, p = .003$. Participants high in autonomy avoided conflicts less than those with low autonomy.

The analysis showed a significant negative relationship between conflict avoidance and the use of core concerns $r(103) = -.29, p = .003$. Participants with a tendency to avoid conflicts were less likely to use core concerns during conflict situations. No relationship was found between

autonomy and different implicit theories of growth (growth: $r(103) = .08, p = .451$; destiny: $r(103) = -.04, p = .674$).

As the use of core concerns and conflict avoidance were not only correlated with autonomy but also with each other a mediation test was run on the data. Hayes' PROCESS (2013) was used instead of more traditional Sombel test due to the sample size (see MacKinnon, Lockwood, Hoffman, West & Sheets, (2002) for an overview of methods to test mediation). A simple mediation analysis conducted using ordinary least squares path analysis showed that autonomy indirectly influenced the use of core concerns through its effect on conflict avoidance. As illustrated in Figure 1 participants with higher autonomy were less likely to avoid conflicts and confrontations than low autonomy participants ($a = -1.25, t = -3.31, p = .001$). Participants with low conflict avoidance were more likely to use techniques in line with the core concerns principles when faced with a conflict ($b = -.04, t = -2.31, p = .023$). A bias-corrected bootstrap confidence interval for the indirect effect ($ab = .05$) based on 10,000 bootstrap samples was entirely above zero (.012 to .113). There was a positive relationship between autonomy and the use of core concern techniques ($c = .17, t = 2.51, p = .014$). When holding conflict avoidance constant this relationship was no longer significant ($c' = .12, t = 1.71, p = .090$).

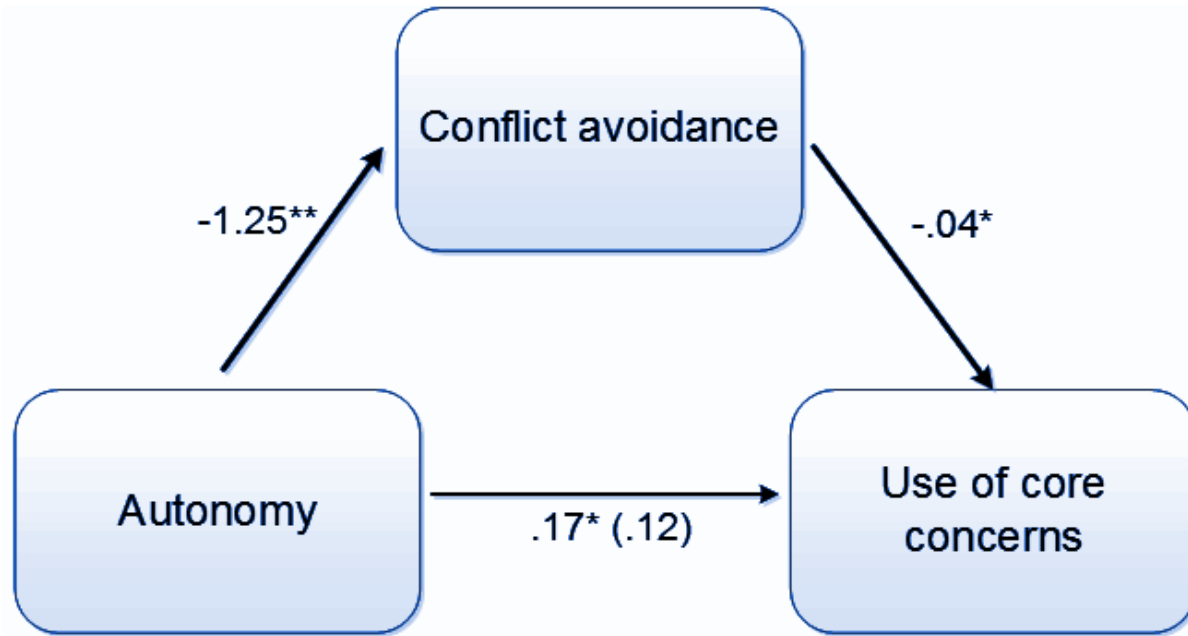


Figure 1. Unstandardized regression coefficients for the relationship between autonomy and the use of core concerns as mediated by conflict avoidance. Unstandardized regression coefficient between autonomy and use of core concerns controlling for conflict avoidance is in parentheses.

$p^* < .05$, $p^{**} < .005$.

Discussion

The current study aimed to broaden the knowledge on autonomy and conflicts outside its origins in romantic relationship research. The results suggests that the link between autonomy and better conflict strategies is not exclusive to romantic relationships. Autonomous individuals were more likely to engage in active coping strategies such as planning, positive reframing, and use of emotional support when faced with conflicts. On the other hand, low autonomy individuals were more likely to engage in behavioural disengagement, denial, self-blame and substance use. These findings are consistent with the previous literature, although, relationship between some of the coping strategies have not been replicated. For example, Knee et al. (2002) linked high autonomy with active coping, acceptance and use of instrumental support and low autonomy with

use of religion and venting. Part of the difference can be explained by a lower power of the current study which used significance level adjustment due to the high number of comparisons. However, the trends are identical for both studies even if an acceptable level of significance was not reached. Failure to replicate the relationship between low autonomy and use of religion such as praying and meditating could be attributed to the different demographics of the participants. The dominant group in the current study was Swedes, who are stereotypically less religious than the American participants in previous studies. The use of religion as strategy was therefore low across both autonomy groups.

Additionally, the study attempted to examine the claim that autonomy may manifest itself as “growth motivation”. Knee et al. (2002) characterise growth motivation as openness to changes and challenges and desire for growth and improvement. They also propose that such individuals should be less likely to avoid conflicts, but rather see them as opportunities for learning. The study, however, did not measure this new manifestation of autonomy opting for the more widely used measure of motivational orientations. As Knee et al. (2002) were first to describe growth motivation, there are no corresponding measures or questionnaires. This study used conflict avoidance and implicit theories of growth as possible growth motivation indicators.

The study found no relationship between autonomy and either growth or destiny beliefs. Autonomous individuals were no more likely to believe that humans are capable of growing, developing and changing who they are than their low autonomy counterparts. Two interpretations of these results are possible.

First, autonomy can manifest as growth motivation, however, neither manifestation is related to growth beliefs. Belief in the malleability of human nature is not necessary for perceiving challenges as growth opportunities rather than threat to one’s ego. Second, autonomy and growth motivation are separate though possibly related concepts. A great advantage of the

self-determination framework is that it has been applied to many fields, situations, problems and demographics. Yet, it may sometimes be difficult to relate different findings as each setting has its own conceptualisation and measurement. In some instances such field specific adjustments might alienate the concepts from their original definitions. An example is a study of adolescent couples by Mc Isaaca, Connollya, Mc Kenneya, Peplera and Craig (2008) which attempts to integrate self-determination framework with the research on adolescent negotiation of autonomy. While the study builds on self-determination literature, the measure of autonomy it uses—observational coding—is rooted in the view of autonomy as separation from parents, which is distinct from the SDT autonomy definition. (For a summary of different versions of autonomy in research on adolescents see Beyers, Goossens, Vansant & Moors, 2003). As pointed out by Knee, Hadden, Porter and Rodriguez (2013) one of the cornerstones of SDT is that the same behaviour can be motivated by different reasons that are more or less autonomous. The degree of autonomy can explain why a seemingly identical behaviours can have very different consequences. This means that the SDT version of autonomy can not be measured by observation as the motivation behind the behaviour is not visible, making the discussed study unrelatable to other research using the SDT framework. Growth motivation might be another instance of autonomy variation that has gone too far from the original definition. In future studies it might be beneficial to investigate growth motivation and the position on the autonomy continuum as two separate but related concepts.

The study found a significant relationship between autonomy and the second indicator of growth motivation: conflict avoidance. The study aimed to be the first to address the claim made by Knee et al. (2002) that autonomous (or growth motivated) individuals are less likely to avoid conflicts as they pose less of a threat to their ego. Instead, autonomous individuals perceive conflicts as opportunities for learning and growth. The findings of this study support the first part

of the claim: people who scored high on autonomous functioning reported to avoid conflicts less than people with low autonomy. Unfortunately, the second part of the claim was not explored. As such, further research will be necessary in order to conclusively decide on whether autonomy does manifest itself as growth motivation and, possibly, under which conditions.

As demonstrated in previous literature (Knee et al., 2002; Knee et al., 2005) as well as in the current study, people with low autonomy tend to employ less direct strategies when faced with conflicts. For example, this study found that people with low autonomy are more likely to use substances such as alcohol or other drugs to deal with conflicts, deny their interpersonal problems and give up on solving them. It comes as no surprise that such individuals are more likely to avoid conflicts altogether. There is a number of possible explanation for the connection between autonomy and conflict avoidance. High autonomy has been connected with higher relationship happiness (Blais, Sabourin, Boucher & Vallerand, 1990) commitment, intimacy and satisfaction with the relationship (Gaine and La Guardia, 2009). Autonomous individual might therefore be more willing to spend time and resources on solving interpersonal conflicts because they perceive their relationships as more satisfactory, happier and “worth it”. On the contrary, the findings of Hadden et al. (2015) suggest that autonomous people might have less selfish reasons to actively solve their interpersonal troubles. The study shows that autonomous people are more likely to support their partner irrespective of benefits on self-esteem or relationship satisfaction. Several alternative explanations present themselves (eg. perceived confidence in ability to solve conflicts), however, they remain for future studies to be explored.

Finally, the study sought to link self-determination theory to the more “user-friendly” core concern technique. As expected there was a positive relationship between autonomy and the use of core concerns. Participants with higher autonomy reported to use more core concern strategies than those with low autonomy. These findings are in line with those of Roth et al. (2007) who

found that autonomous individuals tend to be more need supportive. While being widely popular, the core concern approach lacks empirical support of its effectiveness. Instead, its founders quote their numerous successes in international negotiations during their career as validation of their methods. Although impressive, a well designed experiment or a longitudinal study would certainly add to the technique's name. I hope that this study will be joined by many more and that the empirical and practical approaches to conflicts and their resolution will be brought together. There are many benefits that could come from the collaboration. The core concern technique could acquire empirical evidence of its effectiveness. The SDT framework could build on the core concerns to create practical tools that could be used by the general public. The SDT framework has successful practical applications in some areas, most notably education, clinical and organisational settings. A good example is Field and Hoffman's (2002a, 2002b) Steps to Self-Determination. Such methods are missing in the still new area of self-determination, conflicts and romantic relationships providing an opportunity to integrate the 5 core concerns into the theory. In the end, it would not be the first time the SDT framework was incorporated with a new approach. Attachment theory, motivational interviewing and theory of planned behaviour are just some of the frameworks that have been integrated with SDT (La Guardia, Ryan, Couchman & Deci, 2000; Vansteenkiste, Williams & Resnicow, 2012; Hagger & Chatzisarantis, 2009).

Not only were core concerns positively correlated with autonomy, the data analysis also showed a negative relationship with conflict avoidance. As the study was the first to empirically connect the core concerns and autonomy, I decided to investigate beyond the proposed hypothesis and perform a mediation analysis. The analysis suggests that the effect of autonomy on the use of core concerns is mediated by conflict avoidance. Low autonomy individuals do not use core concerns, and possibly other active coping strategies—as showed in the previous analyses, as they prefer to avoid the situation altogether.

Some argue against the use of mediation in cross sectional studies as they do not allow for causal ordering of the observed relationship (Judd & Kenny, 1981; Maxwell & Cole, 2007).

However, my beliefs are closer to those of Hayes (2013), who pointed out that mediation, like all statistical methods, is just a tool and can be used to examine any data as long as you keep the limitations of the study's design in mind. As such it is useful to note that this study does not claim to uncover a causal chain between autonomy and core concerns mediated by conflict avoidance. Rather, it suggest a possible relationship, and hopes to inspire further research of the three concepts.

So far, research, including the current study, has connected high autonomy with active and positive strategies and low autonomy with avoidance strategies (Knee et al., 2002; Knee et al., 2005). People with low autonomy tend to engage in behaviours that distract them from the conflict and are detrimental to the conflict's resolution. On the other hand, autonomous individual engage in active strategies which result in more positive outcomes. As mentioned earlier, there are several possible explanations of this dichotomy and the area requires further investigation. An interesting strategy for future studies is to examine a group of conflict strategies which are both active and have negative consequences. The SDT framework has yet to investigate if and how is autonomy related with conflict behaviours like hostility, verbal and physical violence, threats and manipulation.

Limitations

In the history of social sciences the use of questionnaires as data collection tools has brought about a considerable debate (Ackroyd & Hughes, 1983). A common criticism is that there is no way to verify the truthfulness of the answers. Especially in the cases where a set of answers seems more socially desirable, a participant might alter his/her responses to place

themselves in a more positive light. In this case participants may report to use more positive and/or socially acceptable coping strategies. In order to increase the external validity Knee et al. (2002) used semi structured interview aimed at uncovering differences in participants view of their relationship and subsequently asked participants to discuss these differences and agree upon a common answer. Yet, this approach has been criticized for artificially exaggerating minor discrepancies and the importance of addressed issues (Knee et al., 2005). It is doubtful whether the current study, or possibly any other study, would benefit from a more realistic enactment of conflicts. Not only it is not feasible within an online questionnaire design such as this one, it is also ethically questionable to put a participant in a position of conflict with another human being. It may have adverse effects on the individual's emotional state as well as disrupt the relationship between the two parties. Knee et al.'s (2005) study employed diary entries along with questionnaires. These, however, suffer from similar limitations. Participants may not report all of the conflicts or may report them in a more positive light. The current study tried to encourage honest reporting through assurance of data anonymity in the consent form presented to the participant before the beginning of the survey as well as through encouraging messages in the instructions (eg. "People think, feel and act differently when faced with these kinds of situations.", "There are no right or wrong answers.", "We are interested in how you are most likely to respond.").

Data for two questions of the autonomy measure were missing for most of the participants. It is unclear whether these questions were purposefully omitted by the participants or misrecorded by the software. Examination of the participants for whom all answers were present suggest no substantial differences between means obtained by averaging all ten items and only the eight items present for all participants. However, we can not be certain that the two items would not substantially alter the means of those for whom they are missing.

This study is the first to include the use of core concerns in conflict strategies, as such there is no established measure of the concept. The current study created a new measure based on the instructions on how to use the five core concerns in negotiations. According to the frameworks founders, Fisher and Shapiro (2006), the five concerns are overlapping and can be difficult to distinguish. Accordingly, the study used a singular measure of core concerns where the final score was averaged across the use of all five concerns. This might in part be the reason for the low internal validity of the construct. Other forms of reliability and validity of the measure were not tested.

If the use of core concerns is to be included in future empirical research on conflict resolution a standardised measure with recognised reliability and validity limitations is needed. The measure should also strive to distinguish the five concerns thus allowing to determine whether autonomy results in the use of all or only some of the core concerns.

No conclusive results were obtained regarding growth motivation as a manifestation of autonomy. Growth motivation is a new concept proposed by Knee et al (2002) with no established measurement tools. In this study conflict avoidance and implicit beliefs of personal growth were used as possible indicators of growth motivation. While the study found a negative relationship between autonomy and conflict avoidance, no relationship was found between autonomy and neither growth nor destiny beliefs. It is not evident if the chosen indicators truly reflect growth motivation. Hence it remains unclear whether autonomy does manifest itself as growth motivation and under what conditions.

As mentioned earlier, it is necessary to be careful when interpreting the results of the mediation analysis. Maxwell, Cole and Mitchell (2011) warn against using mediation analysis on cross sectional data as it might produce biased results. Further inquiry is necessary to investigate what constitutes the effect autonomy has on conflict strategies. Multiple propositions are to be

tested. Knee et al. (2002) suggest autonomy manifests itself as growth motivation which in turn leads low autonomy individuals to view the conflict as a possible threat to their ego and high autonomy individuals to view conflicts as possible opportunities for growth and improvement. The current study suggest that low autonomy individuals don't engage in active conflict strategies but rather avoid the situation, spending minimum amounts of resources on its resolution.

Shadish, Cook and Campbell (2002) divide generalisability into construct validity and external validity. Construct validity refers to the extend units, treatments, observations, and settings present in the study can be related to the higher order construct they were meant to represent. For example, construct validity of conflict avoidance concerns how a score obtained from set of questions relates to the participant's actual tendency to avoid conflicts. As mentioned above the measure of core concerns poses the highest threat to construct validity, as its validity was not thoroughly examined. External validity refers to the extend a relationship holds over variations in persons, settings, treatments, and outcomes. The study has an optimistic outlook on its external validity. The age and nationality of the study's participants was reasonably varied. Further, the positive effects of autonomy have been demonstrated in a variety of settings, cultures and methodological approaches (Chirkov, 2009; Ryan & Deci, 2000).

Future directions

This study showed that the relationship between autonomy and conflict strategies is generalisable beyond romantic couples. This presents the opportunity to apply the findings to new areas. Educational and organisational settings might particularly benefit as conflict resolutions plays an important role in maintaining a safe and productive atmosphere in schools and workplaces.

Further, future research should aim to uncover the mechanism behind the effect of autonomy on conflict resolution. There are several possible hypotheses to be tested in future studies. The findings of the current study suggest low autonomy might result in less active coping strategies through conflict avoidance. Knee et al. (2002) suggest the effect of autonomy on conflict resolution can be explained through growth motivation - a tendency to see challenges as opportunities for growth rather than threat to one's ego. Finally, finding of Hadden et al. (2015) suggest that autonomous individual engage in positive relationship behaviours without selfish reasons.

Lastly, this study hope to inspire the cooperation between theoretical and practical approaches to conflict resolution. I propose that research should seek to provide evidence for the practical approaches to conflicts and negotiation and integrate them into existing theoretical frameworks. Conflict resolution techniques such as the five core concerns (Fisher and Shapiro, 2006) and non-violent communication (Rosenberg, 2001) can be revised and improved with the latest scientific advances.

Conclusion

The effect of autonomy on conflict strategies persists outside romantic relationships, as demonstrated in the current study. This opens the possibility to apply the current findings to other areas where conflict resolution constitutes an important issue. The study hopes to inspire further research in the area of conflict and self-determination, in particular in the processes underlying the effect of autonomy on conflict strategies. Several hypotheses were proposed for future research. Finally the study encourages a fusion between theoretical and practical approaches to conflict resolution and outlines its possible benefits.

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Appendix A
Informed Consent Form



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Differences in Conflict Strategies

Study on Differences in Conflict Strategies

You are invited to participate in a research project aimed at assessing the differences in how people approach and handle conflicts. You will be asked to complete a set of questionnaires assessing your background information (such as age and nationality), the way you respond and handle conflicts and some general personality traits. The questionnaires are anonymous and will not ask for your name or other identifying information. Your participation in this study is voluntary and you may choose to withdraw from the study at any time. Please allow 10 - 20 minutes to complete this study.

The study is being carried out as a part of the PSYP01VT15 Master's Thesis in Psychology course. The project is carried out by Martina Gúčíková (mاتيagucik@gmail.com) under the supervision of Per Johnsson (per.johnsson@psy.lu.se).

1: I agree to participate in the study

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Appendix B
Questionnaire: Use of Five Core Concerns

Differences in Conflict Strategies

Survey Progress: 1 2 3 4 5 6 7

The following questionnaire measures what behaviours people engage in while having a conflict. Please read the statements below and indicate how likely you are to engage in these behaviours while solving a disagreement with another person.

	Not at all likely - 1	2	3	4	Very likely - 5
1: I try to find something I and the person I have a conflict with have in common.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2: I try to respect the person's freedom to make their own choices.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3: I value the other person's opinion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4: I try to acknowledge the other person's expertise in the matter.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5: I try to work with the other person rather than against them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6: I try to build a personal connection between myself and the other party.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7: I focus on making the other person do what I think is right.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8: I try my best to understand the other person's point of view.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9: If I can, I try to use my higher status to make the other person feel unimportant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10: I try to take on a meaningful role in the discussion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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