

**Self-Regulation in Interpersonal Relationships:
The Case of Action versus State Orientation**

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Self-regulation in Interpersonal Relationships:

The Case of Action versus State Orientation

Self-regulation can be defined as the set of psychological processes through which people bring their thoughts, feelings, and behavior in line with abstract standards, goals, or values (Baumeister, Heatherton, & Tice, 1993; Kuhl & Koole, 2004). In recent years, psychologists have developed a variety of different models and metaphors to try and explain how self-regulation works. Among other things, self-regulation has been conceived as a cybernetic control process (Carver & Scheier, 1981), a limited resource (Vohs & Baumeister, 2004), a synthesis (Ryan & Deci, 2004), a dynamical system (Vallacher & Nowak, 1999), and an interaction between psychological systems (Kuhl & Koole, 2004). Metaphorically, self-regulation has been likened to a thermostat (Carver & Scheier, 1982), a muscle (Muraven & Baumeister, 2000), a baseball team (Gray, 2004), a political system (Kuhl & Koole, 2004), and a society of interacting automata (Nowak, Vallacher, Tesser, & Borkowski, 2000).

Prevailing models and metaphors of self-regulation, despite their differences, have at least one thing in common. They portray self-regulation as a private process, which predominantly takes place within the individual psyche. In everyday life, however, complete privacy is the exception rather than the rule. Self-regulation therefore often serves important interpersonal functions. For instance, people frequently engage in self-regulation to respond constructively in close relationships (Finkel & Campbell, 2001), or to meet the goals and expectations of the social environment (Baumann & Kuhl, 2003). The idea that self-regulation and interpersonal relationships are interdependent is not exactly new. For instance, Freud (1949) already speculated that the development of the superego derived from an internalization of parental norms and values (cf. Moretti & Higgins, 1999). Nevertheless, the interface between self-

regulation and interpersonal relationships did not receive much research attention until fairly recently. Currently, a growing number of studies have found that interpersonal relationships shape the person's capacity for self-regulation (Diamond & Aspinwall, 2003; Finkenauer, Engels, & Baumeister, 2005; Kuhl, 2000; Mikulincer, Shaver, & Pereg, 2003; Wegner & Erber, 1993). Conversely, it is becoming increasingly apparent that self-regulation is a key moderator of people's behavior in interpersonal relationships (Finkel & Campbell, 2001).

In the present chapter, we aim to shed more light on the interface between self-regulation and interpersonal relationships. Our discussion focuses particularly on the notion of *action versus state orientation* (Kuhl, 1981, 1984). Action orientation refers to a *meta-static* or change-promoting mode of control during which self-regulation is facilitated. State orientation refers to a *cata-static* or change-preventing mode of control, during which self-regulation is inhibited. The notion of action versus state orientation has inspired considerable theory and research over the last few decades. In the present chapter, we build on this work to analyze the mutual dependence between self-regulation and interpersonal relationships. In what follows, we begin by considering the notion of action versus state orientation in more detail. We then discuss how dispositions towards action versus state orientation are shaped, triggered, and manifested in the context of interpersonal relationships. We end with our main conclusions and possibilities for future research and applications on the crossroads between self-regulation and interpersonal relationships.

Shielding Effects of Action versus State Orientation

The concept of action versus state orientation was originally developed to explain the dynamics of human action (Kuhl, 1984; cf. Atkinson & Birch, 1970). After

committing to a particular course of action, people are typically exposed to multiple conflicting action tendencies. For instance, consider a person who has decided to spend more time with her partner. At the same time, this person wants to spend time with friends and family, exercise regularly, learn Spanish, and work overtime to get a salary increase. In situations like this, the person faces conflicting action tendencies that are all highly feasible and desirable. Consequently, considerations about feasibility and desirability, the traditional province of motivation theory, are often insufficient to resolve the conflict between different action tendencies (Atkinson & Birch, 1970). Therefore, people need psychological mechanisms that can shield their commitment to a chosen course of action against competing action tendencies. Such *action control* mechanisms (Kuhl, 1984) allow people to remain steady in their goal pursuits even under threatening or demanding circumstances.

Action control facilitates goal achievement, and thus, will often be adaptive. Nevertheless, action control can sometimes yield adverse outcomes (Koole, Kuhl, Jostmann, & Vohs, 2005). In complex or uncertain situations, it is often prudent to keep an open mind instead of committing on a losing course of action (De Dreu, Koole, & Steinel, 2000; Simonson & Staw, 1992). Likewise, during uncontrollable situations, even the most sophisticated action plans are unlikely to produce desired outcomes. Thus, it may be better to rely on simple but robust behavior routines that require a minimum of resources (McIntosh, Sedek, Fojas, Brzezicka-Rotkiewicz, & Kofta, in press). In view of these considerations, it would be adaptive if people could suspend action control from time to time. Consistent with this, Kuhl (1984) proposed that people vary in the degree to which they are oriented towards action control. People may be strongly oriented towards action control, and thus become action-oriented. Action orientation is defined as a control mode that promotes the enactment of change-oriented

intentions. Alternatively, people may suspend action control, and become state-oriented. State orientation is defined as a control mode that inhibits the enactment of change-oriented intentions.

Under extremely demanding or threatening conditions, most people are bound to become state-oriented. This is because even the most powerful forms of action control may be insufficient when people are faced with extreme difficulties. Under extremely demanding conditions, for instance, even very efficient action plans may not keep people from being overloaded by their duties and responsibilities. Likewise, in the face of an immediate threat like an attacking bear or an approaching tsunami, there may be insufficient time to plan the quickest escape route. Under these circumstances, the only way to save one's skin may be to act on one's first impulses, without premeditation. In line with the normative functionality of state orientation under extreme conditions, research indicates that most people opt for more primitive forms of behavior control when they are confronted with uncontrollable situations (Maier & Seligman, 1976; McIntosh et al., in press).

In more moderate situations, individual differences in action versus state orientation are likely to emerge. Some individuals may remain action-oriented even under highly demanding and threatening circumstances; other individuals may become state-oriented at relatively mild levels of demand or threat. Kuhl (1981, 1994) has developed a self-report instrument to measure individual differences in action versus state orientation, the ACS90 (for psychometric validation, see Diefendorff et al., 2000; Kuhl & Beckmann, 1994). Illustrative items are presented in Table 1. The ACS90 distinguishes between *demand-related action orientation (AOD)*, which relates to action control in demanding situations, and *threat-related action orientation (AOT)*, which relates to action control in threatening situations. Each ACS90 item presents

individuals with a description of a stressful situation and two different ways of responding to the situation, an action- or a state-oriented response. The number of action-oriented responses across the scale is taken as an indicator of the individual's action orientation. If the individual responds to the majority of situations in an action-oriented manner, we infer that the individual is inclined towards action orientation. If the individual responds to the majority of situations in a state-oriented manner, we infer that the individual is inclined towards state orientation.

Individual differences in action versus state orientation have been extensively investigated in over 60 published studies (for reviews, see Diefendorff, Hall, Lord, & Streat, 2000; Koole & Kuhl, in press; Kuhl & Beckmann, 1994a). Throughout this work, consistent differences between action- versus state-oriented individuals have emerged across cognitive, emotional, behavioral, neurobiological, and psychophysiological responses. Moreover, predictable differences between action- versus state-oriented individuals have been found across a broad range of different tasks and contexts, ranging from well-controlled laboratory tasks to behavior in real-life situations such as job success, academic achievement, and athletic performance. Finally, the effects of action versus state orientation could not be explained by achievement motivation (Heckhausen & Strang, 1988), self-esteem (Koole & Jostmann, 2004), or emotion suppression and reappraisal strategies (Koole 2004), and occurred over and above the effects of the "Big Five" personality dimensions (Baumann & Kuhl, 2002; Diefendorff et al., 2000; Palfai, 2002).

The effects of action orientation can be summarized into three main mechanisms: *affect shielding*, *intention shielding*, and *self shielding*. Affect shielding refers to the person's ability to inhibit unwanted affective states. Action orientation is a strong predictor of down-regulation of negative affect in response to real-life stressors

(Kuhl, 1983) and reduced depression (Rholes, Michas, & Shroff, 1989). In response to threatening or demanding laboratory manipulations, action orientation is associated with fewer spontaneous expressions of negative affect (Brunstein & Olbrich, 1985), tension reduction (Koole & Jostmann, 2004), and reduced physiological arousal (Heckhausen & Strang, 1988). Especially under demanding conditions, action orientation correlates with down-regulation of implicit negative affect, for instance, as assessed by an interference task (Koole & Jostmann, 2004), or a lexical decision task (Koole & Van den Berg, 2005). Recent studies found that action orientation even predicts down-regulation of negative affect on subliminal levels (Jostmann, Koole, van der Wulp, & Fockenberg, 2005; Koole & Van den Berg, 2005).

Both forms of action orientation, AOT and AOD, are related to affect shielding (e.g., Koole & Jostmann, 2004; Koole & Van den Berg, 2005). Intention shielding and self shielding, however, relate specifically to either AOT or AOD. AOD is associated with *intention shielding*, i.e., efficiency at forming, maintaining, and executing difficult intentions under demanding circumstances. Compared with individuals low on AOD, individuals high on AOD are faster at decision-making (Stiensmeier-Pelster & Schürmann, 1994) and are better able to commit themselves to their own decisions (Beckmann & Kuhl, 1984). AOD further predicts efficient implementation of difficult intentions (Heckhausen & Strang, 1988; Kuhl, 1985; Kuhl & Beckmann, 1994b). The intention shielding effects of AOD have been documented for well-controlled laboratory tasks, such as the Stroop color-naming task, the control of automatically activated gender stereotypes, and working memory tests (Jostmann & Koole, 2005a,b). Notably, AOD also predicts intention shielding in real-life settings, as indicated by superior work performance (Diefendorff et al., 2000) and more effective health change behavior (Palfai, 2002; Palfai, McNally, & Roy, 2002).

AOT is associated with *self shielding*, i.e., efficiency at forming and maintaining coherent self-representations. Self shielding is often accompanied by the experience of autonomy, or a subjective sense of "self-determination" (Deci & Ryan, 2000). From a functional perspective, effective shielding of the self requires that aspects of the self are cognitively accessible. Consistent with this, AOT is associated with improved memory for decisions made by the self (Kuhl & Kazén, 1994). This improved cognitive access to the self emerges especially under aversive conditions (Baumann & Kuhl, 2003). A sense of self-determination can also be achieved by integrating new experiences that are initially not part of the self's intrinsic needs and preferences (Deci & Ryan, 2000). Several studies support the idea that AOT is linked with cognitive integration abilities, particularly under aversive conditions. AOT is associated with improved ability to form coherence among different cognitive elements, especially when negative affect is high (Baumann & Kuhl, 2002). Cognitive integration abilities should also help the individual to integrate implicit and explicit personality aspects. Consistent with this, AOT is associated with greater congruence between explicit goals and implicit needs, as assessed by the thematic apperception test (Brunstein, 2001; cf. McClelland, Koestner, & Weinberger, 1989).

Action versus State Orientation in Interpersonal Relationships

To date, most studies on action versus state orientation were not designed to link this disposition to interpersonal relationships. Nevertheless, over the years, more and more findings have accumulated that seem relevant to the interpersonal dimension of action versus state orientation. It thus seems timely to consider how action versus state orientation can be situated within the context of interpersonal relationships. There are at least three basic ways in which action versus state orientation and interpersonal relations are mutually intertwined. First, interpersonal relations may be critical

antecedents of chronic dispositions towards action versus state orientation. Second, interpersonal relations can provide the proximal *triggers* which cause individual dispositions towards action versus state orientation to become manifest. Third, many of the *consequences* of action versus state orientation become manifest in the context of interpersonal relationships. In the next paragraphs, we discuss each of these three interfaces between interpersonal relations and action versus state orientation.

Interpersonal Antecedents of Action versus State Orientation

The development of self-regulation skills through socialization processes is endorsed both by classic theories (Bowlby, 1969; Freud, 1949) and by contemporary accounts of self-regulation (Finkenauer et al., 2005; Mikulincer et al., 2003; Moretti & Higgins, 1999; Wegner & Erber, 1993). In line with these various approaches, Kuhl (2000, 2001) suggested that chronic dispositions towards action versus state orientation may be shaped more by socialization processes than by genetic factors. This proposal was tested empirically by Kästele (1988), who examined individual differences in action versus state orientation among mono- and dizygotic twins. Kästele also examined individual differences in extraversion and neuroticism, two traditional personality traits that are known to possess a sizable genetic component (e.g., Jang, Liveley & Vernon, 1996). Consistent with prior research, extraversion and neuroticism were more similar among monozygotic twins than among dizygotic twins. Action versus state orientation, however, was no more similar among monozygotic than among dizygotic twins. The genetic component in action versus state orientation thus appears to be modest, and indeed significantly smaller compared to the genetic component of more traditional personality traits.

Socialization conditions that impair children's ability to disengage from unwanted affective or motivational states may increase dispositions towards state

orientation in adulthood (Kuhl, 1994). Examples of such conditions include authoritarian educational styles, overemphasis of duties and responsibilities, achievement, or behavioral consistency. Some initial studies suggest that these socialization conditions are indeed important in shaping dispositions towards action versus state orientation. One relevant study found that mothers' socialization practices during early childhood were correlated with their children's action versus state orientation scores (Humbert, 1981). Mothers who were controlling, for instance, who reported that they frequently interrupted their children when they were playing, had children with significantly increased state orientation scores. Another, more recent, study found that an inconsistent educational attitude of mothers was associated with more state orientation among their daughters (Marszal-Wisniewska, 2001).

Severe life stressors may also promote state orientation, especially to the extent that they lead to chronic negative affect. One such a severe stressor may be parental divorce. Children from divorced parents tend to have more difficulty in school, more behavior problems, more negative self-concepts, more problems with peers, and more trouble getting along with their parents (Amato & Keith, 1991). Accordingly, parental divorce may increase children's dispositions towards state orientation. This notion was recently tested by Koole (2005), in an empirical study among a group of 142 university students (41 men and 101 women, average age 21). In this study, male participants' orientations were not affected by parental divorce, $F_s < 1$. However, parental divorce did affect female participants' AOT scores. As shown in Figure 1, female participants from divorced families displayed significantly lower AOT than female participants from intact families ($p < .05$). Parental divorce had no effect on female participants' AOD scores ($F < 1$). Parental divorce thus appeared to increase children's proneness to become state-oriented, at least for female children. The more pronounced effects of

parental divorce on female children might be due to women's greater tendency to ruminate over negative events (Nolen-Hoeksema, 1987). Moreover, parental divorce appears to primarily influence women's ability to cope with threatening situations, while parental divorce may have little influence on women's ability to cope with demanding situations.

How might socialization factors influence the person's disposition towards action versus state orientation? A systematic approach to this question is provided by the *systems-conditioning model* (Kuhl, 2000). According to the model, the pathway between two psychological systems becomes strengthened each time the systems are activated within a brief time window. Based on this conditioning process, the person's self (i.e., central executive systems) can develop links with other psychological subsystems, and thereby, acquire the capacity to regulate the activation of these subsystems. This developmental process can be illustrated in the context of a mother's interactions with her children. The child is genetically predisposed to respond with positive affect to the mother's encouraging vocalizations and her initiation of eye contact (Schore, 1996). The child's ensuing expression of positive affect is presumably mediated by the child's rudimentary self-system. Thus, over time, the positive affect that the mother generates will gradually become associated with the child's self. As a result of this conditioned association, merely activating the child's self can be sufficient to activate positive affect. Ultimately, the child's self has acquired the capacity to activate positive affect without external help (from, in this case, the mother).

The systems-conditioning model remains to be subjected to systematic empirical testing. Even so, available evidence is supportive of the model. More specifically, the systems-conditioning model is consistent with evidence that autonomy-supporting education styles promote intrinsic motivation and emotional well-being (Deci & Ryan,

2000), and numerous studies showing that harsh and chaotic parenting leads to deficits in emotion-regulation skills (Repetti, Taylor, & Seeman, 2002; Taylor, Lerner, Sage, Lehman, & Seeman, 2004). The notion of responsivity in attachment research (Bowlby, 1969) is also relevant to systems-conditioning processes. Based on the systems conditioning model, autonomy-supportive conditions and responsivity can be interpreted as temporally contingent and behaviorally adequate responding to the self-expressions of the child (Keller et al., 1999; Keller, 2001). As such, autonomy-supportive conditions and responsivity may function as catalysts of systems-conditioning processes. Conversely, harsh and chaotic styles of interpersonal interaction interfere with systems-conditioning processes, and thereby inhibit the development of self-regulation skills.

To date, the most direct test of the systems-conditioning model has been conducted by Schulte, Hartung, and associates. These researchers analyzed 192 videotaped interactions between 17 therapists and 48 phobic patients (Schulte, Hartung, & Wilke, 1997). Their findings indicated that a specific interaction sequence was indicative of the therapists' efforts to guide their clients' self-regulation processes. During this interaction sequence, the client started with an action oriented expression (e.g., "I know I can make it happen!"). The therapist then responded with an action-oriented statement (e.g., "How do you intend to make it happen?"). This interaction sequence maps on to the systems-conditioning model, in that the therapist provides matching responses to the self-expressions of the client. The matching sequence was a frequent type of interaction, and occurred during 25.3% of all interactions. Importantly, the frequency of the matching sequence during therapy was an important predictor of therapeutic success, especially when the sequence occurred during early therapy sessions.

Alternatively, a state-oriented mode expressed by the client (“I simply feel awful”) may be counter-regulated by a therapist’s action-oriented mode (“What thought might help you overcome this feeling?”). Another study found this counter-regulation to be another efficient method of facilitating self-regulation of affect through systems conditioning (Hartung & Schulte, 1994). Based on the systems-conditioning model, we may speculate that counter-regulation by the therapist helps the client to access the self-system, which is a necessary precondition for building up the clients' own affect regulation skills. Accordingly, the counter-regulation strategy may be particularly helpful when clients' cognitive access to the self is chronically inhibited (i.e. the client has difficulty with self-expression). Taken together, there is growing evidence that interpersonal interactions that support the self can strengthen dispositions towards action orientation. Conversely, threatening interpersonal interactions appear to strengthen dispositions towards state orientation.

Interpersonal Triggers of Action versus State Orientation

Having a predisposition towards action or state orientation does not mean that one is constantly driven to respond in line with this orientation. Rather, a predisposition towards action or state orientation refers to the person's *potential* for becoming either action- or state-oriented in situations that call for active self-regulation. Predispositions towards action or state orientation may thus often remain latent and thus invisible in the person's overt behavior. Indeed, research indicates that functional differences between action- versus state-oriented individuals are minimal under low-stress conditions (i.e., situations that are characterized by low levels of demand and low levels of threat). When conditions are sufficiently relaxing, state-oriented individuals may even outperform action-oriented individuals on self-regulation measures (Koole et al., 2005).

Dispositions towards action or state orientation tend to manifest themselves especially when situational cues indicate an immediate need for active self-regulation. These situational cues can be thought of as *proximal triggers* that activate the person's latent potential for action- versus state-oriented coping. In some cases, these proximal triggers may be self-generated. For instance, a person may suddenly realize that she has missed an important opportunity and has to redouble her efforts to meet her goals. This dawning realization may then trigger a latent predisposition towards action versus state orientation. If the person has a predisposition towards action orientation, an awareness of upcoming difficulties may lead person to engage in pro-active planning and mobilize resources to rise to the occasion (Aspinwall & Taylor, 1997). By contrast, if the person has a predisposition towards state orientation, an awareness of upcoming difficulties may lead the person to feel overwhelmed and to ruminate incessantly (Kuhl, 1994).

Proximal triggers of action versus state orientation may also originate from the social environment. Indeed, there are reasons to believe that the social environment is very important in triggering latent predispositions towards action versus state orientation. First, social cues are closely associated with the learning conditions that give rise to dispositions towards action or state orientation. It thus seems plausible that social cues can be powerful stimuli for reinstating those learning conditions, and thereby, trigger latent dispositions towards action or state orientation. Second, the need for self-regulation often arises in the context of interpersonal relations (Finkel & Campbell, 2001). After all, interpersonal relations are replete with demands, difficulties, negative feedback, miscommunication, conflict, and other conditions that require individuals to exert extra effort to remain calm, motivated, and ready to act.

The interpersonal nature of triggering conditions of action versus state orientation has often remained somewhat implicit in the literature. Nevertheless, a close

examination of the literature reveals that researchers have often capitalized on interpersonal settings to examine individual differences in action versus state orientation. First, it is noteworthy that many effects of action versus state orientation have emerged in settings in which there existed powerful achievement norms, such as educational settings (Boekaerts, 1994), commercial companies (Dieffendorf et al., 2000; Kuhl & Kazén, 2003), and competitive sports (Beckmann & Kazén, 1994; Heckhausen & Strang, 1988).

Second, experimental procedures that have been used to study differences between action- versus state-oriented individuals often contain important interpersonal cues. Consider the self-discrimination task, a task that has consistently yielded differences between action- and state-oriented individuals (Baumann & Kuhl, 2002; Kazén, Baumann, & Kuhl, 2003; Kuhl & Kazén, 1994). During the self-discrimination task, researchers compare participants' memory for self- versus other-assigned activities. Although the self-discrimination task might appear to be primarily a cognitive task, the task has a significant interpersonal dimension. In particular, the task requires that the experimenter assumes the role of the "boss" who assigns activities, whereas participants assume the role of a "secretary" who executes activities. It seems plausible that the interpersonal power dynamics that are implied by this scenario serve as proximal triggers of the effects of action versus state orientation.

Notably, recent research has used procedures that explicitly involve interpersonal dynamics in triggering effects of action versus state orientation. In particular, recent experiments manipulated performance-contingent versus non-contingent rewards to trigger effects of action versus state orientation (Jostmann & Koole, 2005a; Koole, 2004; Koole & Jostmann, 2004). Performance-contingent rewards are well-studied form of social control, which is used pervasively in modern society

(Deci, Koestner, & Ryan, 1999). Research indicates that action- versus state-oriented individuals function very differently in response to performance-contingent rewards. Performance-contingent rewards enhance self-regulation among action-oriented individuals, whereas performance-contingent rewards undermine self-regulation among state-oriented individuals (Koole, 2004). By contrast, differences between action- versus state-oriented individuals are much smaller or even reversed in response to non-contingent rewards. Similar to the self-discrimination task, social control appears to be a powerful proximal trigger of individual differences in action versus state orientation.

Other recent experiments have used *relationship schema priming* (Baldwin, 1992) to trigger effects of action versus state orientation (Koole, 2004; Koole & Jostmann, 2004). In this paradigm, participants are asked to visualize a demanding versus an accepting relationship partner. The underlying idea is here that visualizing a relationship partner implicitly activates the interaction patterns and psychological responses that individuals experienced within a specific relationship context. Consistent with this, research indicates that action- versus state-oriented individuals function differently after visualizing a demanding person (Koole, 2004; Koole & Jostmann, 2004). Visualizing a demanding person appears to enhance self-regulation among action-oriented individuals, whereas visualizing a demanding person appears to undermine self-regulation among state-oriented individuals. By contrast, differences between action- versus state-oriented individuals tend to be much smaller or even reversed after visualizing an accepting person. Taken together, relationship schemas appear to act as important triggers of individual differences in action versus state orientation.

Interpersonal Consequences of Action versus State Orientation

As we have seen, chronic differences in action versus state orientation are shaped and triggered by interpersonal relations. It thus seems intuitively plausible that action versus state orientation will moderate at least some interpersonal behaviors. To date, however, the interpersonal consequences of action versus state orientation have not received much research attention. Our discussion is therefore limited to some theoretical conjectures and preliminary findings on how action versus state orientation influences interpersonal relations.

Theoretically, the influence of action versus state orientation on interpersonal relations is likely to depend on the nature of the relationship. In particular, it is important to take into account in how far the relationship is freely chosen and congruent with the totality of the person's self, psychological needs, motives, and desires. For *self-congruent relationships*, action orientation can be expected to facilitate relationship maintenance mechanisms. Among the various relationships that people maintain, romantic relationships seem especially likely to be self-congruent. Thus, one would expect action orientation to be associated with positive outcomes in romantic relationships. Consistent with this, a recent study among 45 couples found that couples with high scores on the AOT scale reported greater relationship satisfaction and commitment than couples with low scores on the AOT scale ($r_s = .33$ and $.34$, respectively, Jostmann & Finkenauer, 2004). In the same study, correlations between relationship satisfaction and commitment and couples' scores on the AOD-scale were positive but not statistically reliable (both $r_s = .15$).

Though suggestive, the aforementioned association between action orientation and relationship outcomes should be regarded as preliminary. First, because the result is purely correlational, it is conceivable that couples' action orientation was the outcome rather than the cause of relationship satisfaction and commitment. Second, more work is

needed to understand the mechanisms through which action versus state orientation may affect relationship outcomes. For instance, it is possible that action-oriented individuals are to better able to perform the cognitive work that is required to manage empathic accuracy (Ickes & Simpson, 2001). In a previous study, participants scoring high on AOD were better able than those having low scores to guess their partner's preferred leisure activities on an imaginary vacation trip (Gunsch, 1996; Kuhl & Kazén, 1997). Moreover, AOD was significantly associated with participants' inclination to become affected in their own preferences by thinking about their partner's preferences. Thus, some initial work suggests that action orientation promotes empathic accuracy.

Alternative relationship maintenance mechanisms are suggested by the literature on close relationships. For instance, efficient affect shielding might allow action-oriented individuals to maintain a more favorable image of the relationship (Van Lange & Rusbult, 1995). In a related vein, action-oriented individuals (especially those of the AOT-type) might be better capable of the cognitive work that is needed to see virtues in their partners' faults (Murray & Holmes, 1993). Finally, action oriented individuals (especially those of the AOD-type) can be expected to initiate more new and arousing activities that are needed to keep a relationship fresh over time (Aron, Norman, Aron, McKenna, & Heyman, 2000). These respective mechanisms may be addressed in future research.

Not all interpersonal relationships are likely to be congruent with the person's self. Indeed, most people have at least occasionally experienced interaction partners who were overly demanding or threatening to the self. For such *self-incongruent relationships*, action orientation can be expected to promote active resistance against interpersonal relationships that are overly demanding or threatening to the self. Conversely, it can be expected that state orientation promotes succumbing or giving in

to overly demanding or threatening interpersonal relationships. Initial evidence is consistent with this notion. Specifically, an investigation using the classic Asch-conformity paradigm found that state-oriented individuals were especially likely to comply with unreasonable group demands (Beckmann, 1994). Action-oriented individuals, by contrast, showed no evidence of conformity with group pressures. In a related vein, another study showed that state-oriented children are more inclined than their action-oriented counterparts to engage in effortful self-control (i.e., delay of gratification) in response to controlling instructions by an authority figure (Baumann & Kuhl, in press).

Research has further shown that state-oriented individuals (especially those scoring low on the AOT scale) are prone to *self-infiltration*, that is, mistaking assigned activities for self-chosen activities (Kuhl & Kazén, 1994). By contrast, action-oriented individuals typically show no evidence of a tendency towards self-infiltration. Ironically, state-oriented individuals are especially susceptible to self-infiltration when they are experiencing negative affect (Baumann & Kuhl, 2002) and when the assigned activities are aversive (Kazén, Baumann, & Kuhl, 2003). Thus, it seems that state-oriented individuals are most vulnerable to self-infiltration under conditions that are likely to predominate within the context of overly demanding or threatening interpersonal relationships. Notably, self-infiltration may not only relate to concrete activities, but also to more abstract evaluations of the self. Indeed, we have recently found evidence that demanding relationship partners may activate negative self-evaluations in state-oriented individuals, both explicitly (Koole & Jostmann, 2004, Study 3) and on implicit levels (Koole, 2004, Study 1).

The self-infiltration tendencies of state-oriented individuals may be part of a more general pattern among these individuals to gravitate towards relationships in

which self-other boundaries are not clearly defined (Kuhl, 2000). In the psychoanalytic literature, the latter type of relationships is referred to *symbiotic relationships* (Halberstadt-Freud, 1993; D. K. Silverman, 2003; L. H. Silverman & Weinberger, 1985). Indeed, state orientation is positively correlated with self-reported tendency towards self-other blurring in romantic relationships (Gunsch, 1996). Symbiotic tendencies are characterized by an unwillingness to grant the partner personal and emotional autonomy.

The need to have another person regulating one's emotions may be one factor that underlies state-oriented individuals' preference for symbiotic relationships.

Does state orientation always constitute a liability in interpersonal relations? Perhaps not. First, the positive effects of action orientation on interpersonal relations may be confined to the Western cultures. Indeed, recent research suggests that state orientation may have positive interpersonal effects in interdependent cultures. In these cultures, action-oriented individuals' emotional autonomy may be regarded as an impediment to social integration (Olvermann, Metz-Göckel, Hannover & Pöhlmann, 2004).

Even within independent cultures, action- and state-oriented individuals may achieve synergistic benefits whenever they manage to combine their efforts (Koole et al., 2005). For instance, action-oriented individuals may provide emotional support to state-oriented individuals under acute stress. In turn, state-oriented individuals may contribute their sensitivity for potential risks (as a remedy against excessive optimism), and their willingness to compromise even on issues that are important to themselves. Initial support for this reasoning has been observed among airbus crews, where crews consisting of an action-oriented pilot and a state-oriented co-pilot were found to be more effective than fully action-oriented or state-oriented crews (Haschke & Kuhl,

1995). In a similar vein, a recent study found that dyads consisting of both types of individuals were more effective at a complex problem-solving task than dyads consisting of either type (Witte & Von Pablocki, 1999). Notably, the latter findings were statistically weak and the study's design suffered from some important methodological shortcomings (e.g., lack of statistical power, neglect of moderating variables). Even so, there are some initial grounds for believing that action- and state-oriented individuals may achieve synergistic benefits by working together as a team.

Summary and Future Directions

In the present chapter, we have sought to ground the construct of action versus state orientation within the context of interpersonal relations. We distinguished three basic ways in which action versus state orientation and interpersonal relations are intertwined, which are summarized in Table 2. First, interpersonal relations are antecedents of individual dispositions towards action versus state orientation. The genetic component of action versus state orientation appears rather modest, leaving much room for the social environment to shape people's dispositions towards either orientation. Childhood socialization experiences appear to be critical, as indicated by evidence that state orientation is fostered by frequent interruptions by caregivers, inconsistent or unresponsive educational attitudes, and parental divorce. Nevertheless, dispositions towards action versus state orientation may continue to change throughout adulthood, as studies show that therapists may increase their clients' action orientation by affirming clients' action-oriented responses.

After a disposition towards action or state orientation becomes engrained in the individual's repertoire, interpersonal relations can provide proximal cues that trigger action- or state-oriented coping responses. Many studies that have found effects of individual differences in action versus state orientation were conducted in the presence

of salient achievement norms or authority figures. Thus, the latter two conditions may trigger latent dispositions towards action versus state orientation. There is also evidence that performance-contingent rewards and demanding relationship schemas can serve as interpersonal triggers of action versus state orientation. Given that achievement norms, power differences, and performance pressures are very common aspects of interpersonal relationships, interpersonal settings may frequently trigger differences between action- and state-oriented individuals.

Once triggered, individual dispositions towards action versus state orientation may influence the outcomes of interpersonal relationships. At present, research on action versus state orientation and relationship outcomes has been exclusively correlational, and thus it is not possible to draw firm conclusions about the causal role of action versus state orientation in interpersonal relationships. Nevertheless, research has uncovered some suggestive findings. First, action orientation is associated with greater relationship satisfaction and commitment. Second, state orientation is associated with conformity and self-infiltration (i.e., internalization of social expectations that are negative and alien to the self). Third, state orientation is associated with a preference for symbiotic relationships, relationships in which the boundaries between self and other are blurred. Although the observed associations are preliminary, the available evidence suggests that action versus state orientation may exert an important influence on interpersonal behavior.

The present chapter highlights the need for more empirical research on the role of action versus state orientation in interpersonal relations. In particular, more research is needed on the interpersonal origins of dispositions towards action versus state orientation. Some groundbreaking research has been done in clinical settings (Schulte et al., 1997). However, additional longitudinal research is necessary to chart how

children's interactions with caregivers influence the development of chronic dispositions towards action versus state orientation.

Future research should also do well to track the development of action versus state orientation within romantic relationships. Recent work on the "Michelangelo phenomenon" suggests that romantic partners can foster each other's personal growth (Rusbult et al., this volume). Accordingly, it would be worthwhile to examine how secure romantic relationships influence the development of dispositions towards action versus orientation. In particular, secure relationships are likely to foster the development of chronic action orientation. Furthermore, promoting *flexibility* in action versus state orientation might be a particularly beneficial way for relationship partners to affect the self. Future work would also benefit from a greater process-oriented focus. In this regard, the systems-conditioning model (Kuhl, 2000) may stimulate more fine-grained analyses of the social-affective dynamics that underlie the development of action versus state orientation.

Further research is also needed to understand precisely how interpersonal interactions can trigger latent dispositions towards action versus state orientation. Here, the notion of relationship schemas (Baldwin, 1992) may be useful. Dispositions towards action versus state orientation may be regarded as a sediment of the person's prior experiences in relationships with significant others, which to some extent have developed into "habitualized" and "generalized" coping styles. This conceptualization raises the intriguing possibility that action versus state orientation may not only vary between individuals, but also between relationship partners. Conceivably, some relationship contexts lead individuals to be more action-oriented, whereas other relationship contexts lead individuals to be more state-oriented. Such a contextualized approach to action versus state orientation remains to be tested in future research. The

process through which specific relationship experiences become generalized coping responses also merits further investigation. This generalization process may be facilitated by interpersonal transference (Chen & Andersen, 1999), so that experiences that are specific to a particular relationship come to influence responses to new relationship partners. Accordingly, future research may examine the role of transference in triggering action- versus state-oriented coping styles.

Finally, the interpersonal consequences of action versus state orientation should be given more systematic empirical attention. It is important to know if action orientation can indeed promote relationship satisfaction and commitment. To establish whether action versus state orientation plays a causal role in determining these relationship outcomes, future research should incorporate longitudinal designs (see Cooper & Skaggs Sheldon, 2002, for methodological recommendations for research on personality and close relationships). Future research should also examine the influence of experimental manipulations of action orientation and test for variables that mediate the effects of action orientation on relationship outcomes. Finally, future research should explore the potential synergistic benefits of action and state orientation. Although initial work is suggestive of such benefits, there likely exist important moderators and boundary conditions to a synergy between action- and state-oriented individuals. Given the great theoretical and applied interest in this topic, the potential synergistic benefits of action and state orientation constitute an important avenue for further research.

Concluding Remarks

In the present chapter, we have emphasized the close interdependence between individual dispositions towards action versus state orientation and interpersonal relationships. Dispositions towards action versus state orientation become shaped and

triggered by interpersonal relationships. In turn, the maintenance of interpersonal relationships may be significantly influenced by dispositions towards action versus state orientation. More generally, the present analysis has important implications for the scientific understanding of self-regulation processes. Self-regulation appears to function as an integral part of a *social system*, in which there is a continual, dynamic, and reciprocal influence between individuals and their social networks. Any comprehensive analysis of self-regulation should therefore consider how self-regulation unfolds within the context of interpersonal relationships.

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Table 1: Illustrative Items of the ACS90 (Kuhl, 1994)

Threat-Related Action Orientation (AOT) vs. Preoccupation

- When I have lost something that is very valuable to me and I can't find it anywhere:
 - A. I have a hard time concentrating on anything else
 - B. I put it out of my mind after a little while*
- If I've worked for weeks on a project and then everything goes completely wrong with the project:
 - A. It takes me a long time to adjust myself to it.
 - B. It bothers me for a while, but then I don't think about it anymore*
- When I am being told that my work is completely unsatisfactory:
 - A. I don't let it bother me for too long*
 - B. I feel paralyzed

Demand-Related Action Orientation (AOD) vs. Hesitation

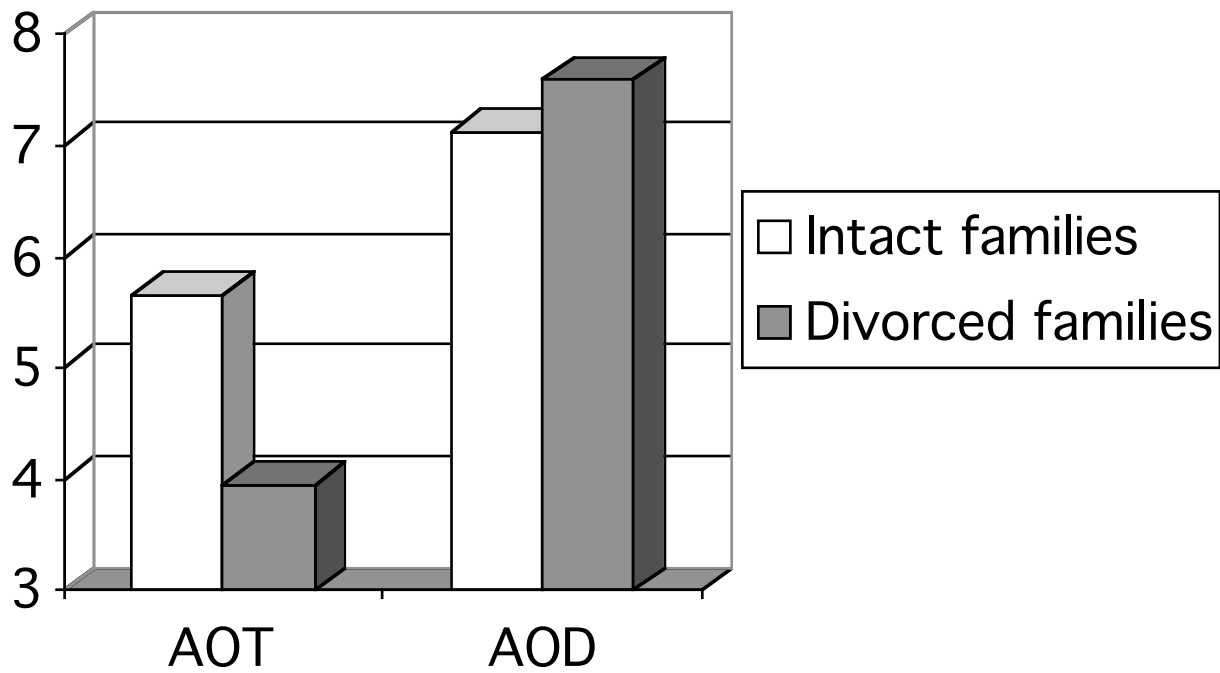
- When I know I must finish something soon:
 - A. I have to push myself to get started
 - B. I find it easy to get it over and done with*
- When I am getting ready to tackle a difficult problem
 - A. It feels like I am facing a big mountain I don't think I can climb
 - B. I look for a way to approach the problem in a suitable manner*
- When I have a boring assignment:
 - A. I usually don't have a problem getting through it*
 - B. I sometimes just can't get moving on it

Note: Action-oriented responses are marked with an asterisk.

*Table 2: Interpersonal Antecedents, Triggers, and Consequences
of Chronic Dispositions towards Action versus State Orientation*

<i>Antecedents</i>	<i>Triggers</i>	<i>Consequences</i>
<p>Environmental influences seem to outweigh genetic influences in shaping chronic dispositions towards action versus state orientation (Kästele, 1988)</p> <p>In childhood, chronic disposition towards state orientation is fostered by <i>frequent interruptions by caregivers</i> (Humbert, 1981); <i>inconsistent educational attitude of caregivers</i> (Marszał-Wisniewska, 2001); and <i>parental divorce</i> (Koole, 2004).</p> <p>In adulthood, chronic disposition towards action orientation is fostered by <i>social affirmation of action-oriented responses</i> (Schulte, Hartung, & Wilke, 1997).</p>	<p>Latent disposition towards action versus state orientation can be triggered by strong <i>achievement norms</i> (e.g., Diefendorff et al., 2000); <i>interpersonal power dynamics</i> (e.g., Kuhl & Kazén, 1994); <i>performance-contingent rewards</i> (e.g., Koole & Jostmann, 2004); <i>activated relationship schemas</i> (e.g., Koole, 2004).</p>	<p>Action orientation is associated with <i>relationship satisfaction and commitment</i> (Jostmann & Finkenauer, 2004).</p> <p>State orientation is associated with <i>conformity</i> (Beckmann, 1994); <i>self-infiltration</i> (Kuhl & Kazén, 1994); <i>impaired knowledge of partner's preferences</i> (Gunsch, 1996); and <i>preference for symbiotic relationships</i> (Gunsch, 1996).</p> <p>Team of action- and state-oriented individuals may achieve synergy (Haschke & Kuhl, 1995; Witte & Von Pablocki, 1999)</p>

Figure 1: Parental Divorce and Female Children's Action Orientation (Koole, 2005)



Note: Action orientation scores ranged from 1 (= very low) to 12 (= very high).