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Running-head: A COGNITIVE PERSPECTIVE ON ASSERTIVENESS

Title: A cognitive perspective on understanding and training assertiveness

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Abstract

Assertiveness has for long been considered an optimal way of expressing oneself whilst at the same time maintaining and/or enhancing social rewards, leading to the conclusion that it should be promoted as an intra and interpersonal protective factor. Yet, little research has tried to provide a comprehensive model on assertiveness, which may better sustain why and how to train it. We propose a cognitive model for explaining how assertiveness comes to be enacted and maintained, considering the activation of previous individual schemas, how they influence the processing of social cues, which in turn influence the interactive activation of cognitive, emotional, and behavioral assertive products. The assertive behavior in turn prompts reactions from the interaction partner. This interpersonal exchange will serve to confirm previous schemas and make them more accessible when facing future social events. We further review findings that sustain the several assumptions involved in this model and proposed how it can sustain cognitive-behavioral approaches to assertive training, building on the premises that the interpersonal psychological functioning is manifested in interpersonal observed behaviors. Subsequently, new directions for the study and training of assertiveness are discussed, based on a social information processing framework and considering the current social challenges and contexts that we, as human beings, must face.

Keywords

Assertiveness, cognitive model, assertive training, social information processing

The historical evolution of the concept of assertiveness (for a review see Peneva & Mavrodiev, 2013) place it first as a stable and distinctive individual characteristic by which one might distinguish healthy and unhealthy persons. Afterwards, it was conceived as a method or process by which to better know and express oneself, as well as to communicate with others. Within this intra and inter-personal process perspective, the pioneer definitions on assertiveness refer to the complete and genuine expression of personal feelings, desires and needs (Salter, 2002), in the context of expressing, legitimating, opposing or making demands (Wolpe, 1973). Thus, is focused on standing up for personal rights, getting what you want, and standing up for yourself (Rakus, 1991). A responsible and empathic perspective on assertiveness followed, based on the definition of assertive rights and responsibilities. Assertive individuals have the right to express personal needs and wishes, to make informed and carefully considered decisions, to be treated with care and respect, to acknowledge having made mistakes, changed ones' mind or needing help, to decide and live in the pursuit of ones' best interest. Assertive individuals must also recognize that others have these same rights, and so take responsibility for not violating the rights of others but rather act in mutual respect, benevolent perseverance and politeness (Jakubowski & Lange, 1976). This perspective on assertiveness is notorious in its subsequent definitions as promoting "equality in human relationships, enabling us to act in our own best interests, to stand up for ourselves without undue anxiety, to express honest feelings (choices, needs or opinions) comfortably, to exercise personal rights (and setting limits to the behavior of others) without denying the rights of others", nor hurting, intimidating, manipulating or controlling them (Alberti & Emmons, 2008, p. 36). Concordantly, Rakus' (1991, p. 16) definition of assertiveness highlights the importance of both the behavior and the social obligations it implies, by stating that: "Assertion (...) should be considered as a chain of overt and covert responses encompassing (personal) rights and their functionally related antecedent and subsequent responsibilities."

Assertiveness requires partially independent response types, depending on social, developmental or situational circumstances; the individual may possess different skills on each type of these responses and find it hard to transfer skills from one situational context to another (Eisler, Hersen, Miller, & Blanchard, 1975; Rakus, 1991). These contexts represent different levels of threat to gaining social rewards, and so assertiveness is the "skill to seek, maintain, or enhance reinforcement in an interpersonal situation (...) when such expression risks loss of reinforcement or even punishment" (Rich & Schroeder, 1976, p. 1082). As such, assertiveness is one of many social skills, which generally refer to socially performing in accordance with cultural and situational demands, in such a way as to achieve more rewarding and satisfactory social relationships, where all parts feel their human rights and value being respected (Del Prette & Del Prette, 1999). Other social skills include cooperation and leadership; assertiveness differs from these particular social skills, on the one hand, by starting on self-expression rather than on

expressing the needs of the group, and, on the other, by aiming for mutual agreements instead of influencing others (Jardim & Pereira, 2006). There are several situational contexts where assertiveness in particular (but not in exclusive) has been proposed as a potentially socially skilled behavior. Frequent examples are: solving conflicts; responding to accurate criticism or unfair treatment; making choices; expressing one's opinion and defending it; refusing others' requests; proposing or requesting the change of inappropriate behaviors enacted by others; making constructive criticisms to the behavior of others; standing up for violations of personal and others' rights; asking for favors, help, or apologies; saying thank you; posing questions; and expressing positive and negative feelings (Alberti & Emmons, 2008; Rakus, 1991, 2006).

But what predisposes to and facilitates that an individual actually enacts assertive responses, in one or all of these situational contexts? Even if the concept of assertiveness has been evolving over time, there is a notorious lack of recent research primarily intending to understand this skill, in addition to a general research gap intending to make joint sense of these early findings. In contrast, relevant reviews have been presented on differentiating assertive from passive and aggressive behavior (Bishop, 2010; Galassi & Galassi, 1978; Marchezini-Cunha & Tourinho, 2010). They have also considered other constructs assertiveness seems to relate to, such as diminished sexual risk behaviors and risk for sexually transmitted diseases (Kennedy & Jenkins, 2011), self-protection from sexual abuse and victimization (Santos-Iglesias & Sierra, 2010), academic and psychosocial success in adolescence (Mayuski, 2010), and diminished social anxiety in children and adolescents (Levitan & Nardi, 2009). Marked difficulties in addressing assertiveness remain, in as much as we know what it relates to and in what different settings it may be pertinent (namely clinical, educational and organizational; Peneva & Mavrodiev, 2013), but neglect to approach it as a complex and mutable psychosocial skill. Even assertive training has been widespread before defining assertiveness with enough precision (Rakus, 1991), so that psychological processes may be better put to use in enhancing assertive practice.

Recent models on psychological functioning, particularly cognitive ones, have proposed that different components of humans' psychological functioning (*i.e.*, cognitions, emotions, and behaviors) interact to produce an integrated intra and interpersonal experience (Young, Klosko, & Weishaar, 2003). These same components have for long been considered as correlates of assertiveness (Lazarus, 1973), making it so that a cognitive framework may be useful for understanding assertiveness, looking for the differences between assertive and nonassertive individuals in their cognitive processes, products, and structures. The literature so far has emphasized describing, differentiating and evaluating assertive behavior, but has overlooked assertive cognition, in addition to merely referring to assertive emotions (Vagos & Pereira, 2009; Watanabe, 2006). Practicing assertiveness implies congruence between what one thinks,

how one feels, and what one does (Alberti & Emmons, 2008), and so all these components and how they interact should be thoroughly considered in trying to explain and train assertiveness.

A cognitive perspective on assertiveness

Investigating the existence of cognitive differences between assertive and nonassertive persons is not a new endeavor; several previous comparative findings have pointed to these differences (for a review see Heimberg & Becker, 1981). Such categorization, however, has not been considered under an interactionist perspective, wherein various psychological processes of assertive persons influence each other to activate an assertive response in each social event and to maintain a tendency for enacting assertive behavior in subsequent social events. Figure 1 depicts the interactionist processes that we propose may underlie assertiveness according to a cognitive framework. It concerns the associations between: 1) the social event and the activation of interpersonal core beliefs, on the one hand, and the processing of social cues, on the other, 2) the activation of core beliefs and the processing of social cues; 3) the processing of social cues and the circumstance-dependent cognitive, emotional and behavioral assertive products, which mutually influence each other; 4) the assertive behavior and the reaction the interaction partner has to it; and 5) the information retrieved from the extant interpersonal exchange and ones' interpersonal core beliefs. The first four processes refer to the explication of how the individual comes to enact an assertive behavior, whereas the fifth process more explicitly conveys how assertiveness is maintained and reinforced through being continuously practiced.

[Insert Figure 1 about here]

When facing a social event, the assertive individual activates interpersonal core beliefs regarding him/herself, the interaction partners, and the exchanges and outcomes that have resulted from previous similar social situations and that have been stored in memory. The observable and external cues taken from this social event will, consequently, be interpreted and coded according both to their objective features and to the subjective standing the individual adopts towards that kind of situations, with that kind of interaction partners. Consider, for example, John, who is currently attending a scientific conference, and is faced with information being transmitted that he doesn't entirely understand and/or agrees with. Because he has previously and consistently been valued for posing questions in classrooms, he may have come to believe that he is capable of posing pertinent questions in an acceptable manner, that lecturers are welcoming and available to such questioning, and that a lecturing context is appropriate for such an exchange. Consequently, when faced with this social event, he may think this situation is objectively close enough to a classroom context, where he has subjectively learnt it is appropriate and rewarding to pose questions.

Provided with this cognitive appraisal of the event, positive self-statements, regarding personal self-efficacy, the value of the assertive response for obtaining personal or social goals,

and/or the perception of others as respectful interaction partners will be activated. In turn, eustress and other positive and motivational emotions are activated, in accordance with the perception of the event as safe and possibly reinforcing. The ground is, therefore, set for the activation of an observable assertive behavior, in this case of expressing personal limitations (Arrindell et al., 1990). Continuing with our example, John may come to think that “It makes complete sense for me to ask this”, feel relax and eager to learn by communicating with this lecturer, and so venture to initiate an interaction with the lecture where he adequately and opportunely expresses his doubts.

Social behaviors, either adaptive or maladaptive ones, will prompt a reaction form interaction patterns. Such reaction is usually in line with the behavior enacted by the individual, thus turning certain interpersonal patterns into self-fulfilling cycles (Horowitz, 1991). If John enacts the assertive behavior using the adequate verbal and non-verbal characteristics that define it, the lecturer will probably be willing to pay attention to him, and give him a specific a satisfactory answer to a specific and pertinent question. John will store information about this interpersonal exchange and the positive outcome of getting informed, which will serve as confirmatory evidence of his initial core beliefs. This new set of information will contribute to strengthening his core beliefs, which will hereafter continue to be activated when facing similar social events. Assertiveness, therefore, feeds on assertiveness.

Empirical findings on a cognitive perspective for assertiveness

The cognitive model outlined above describes several assumptions regarding the subjective and distinctive psychological processes that underlie assertiveness and that may be and have been put under research scrutiny. Studies that have specifically focused in defining and characterizing assertiveness are reviewed below, in as much as they contribute to validate each of these assumptions.

1) Facing a social event leads to the activation of interpersonal core beliefs, on the one hand, and to the processing of social cues, on the other. Assertive deficit has been associated to various interpersonal cognitive themes or schemas, as playing a fundamental role in (not) being assertive: fear of rejection and need for approval, over-concern with the needs and rights of others, negative self-evaluation, perfectionist standards about personal performance but not about the performance of others, and social failure as a permanent and unchangeable condition (Alberti & Emmons, 2008; Alden & Safran, 1978; Golden, 1981; Mizes, Morgan, & Buder, 1989; Rakus, 1991). Using the framework of maladaptive interpersonal schemas (Young et al., 2003), Vagos and Pereira (2007) further found that adolescents with different levels of assertive behavior differed in endorsing specific cognitive themes. Adolescents presenting lower levels of assertiveness expressed doubts about the possibility of having their personal needs of affection, security, belonging and acceptance met in relationships; of being able to autonomously set goals

and function successfully; of possessing intrinsic value and abilities; of the right to concern themselves with personal needs as well as with the needs of others, and of the acceptability of expressing personal feelings, impulses or choices.

In contrast, assertiveness seems to associate to a balanced recognition of personal strengths and weaknesses; to self-confidence, allowing to think about failures or shortcomings constructively; to adaptability and tolerance to frustration, which helps to consider challenging social events realistically; and to self-control, which associates to carefully considering any given event before jumping to conclusions or enacting rushed and ill-advised behaviors (Arrindell et al., 1990; Vagos & Pereira, 2007). Assertiveness also associates to positively thinking of others as equals, with the same interpersonal fundamental rights to be respected (Alberti & Emmons, 2008), worthy and capable, with whom to discuss ideas and opinions, without questioning the intrinsic value and authenticity of each person. If the self is thought of as lovable and capable, if others are seen as trustworthy and emotionally close, and if both the self and others are equally valued in interpersonal encounters, it follows that relationships are thought of as reciprocal encounters, where personal instrumental and emotional needs may be met by sharing, dialoguing, achieving consensus and compromises (Vagos & Pereira, 2009). These themes are noticeably in line with the contents of flexible and adaptive schemas, namely the belief that one is as good as anyone else (...); that one is worthy of having one's need met but not at unnecessary expense to other people; that one's decision and preferences are important, but with an awareness that compromise can be appropriate at times; that responsibility should be taken for meeting one's own needs but with consideration for the needs of others; that one's emotions should be expressed but with appropriate constraints (Elliott & Lassen, 1997, p. 23-24).

As for the processing of social cues taken from a social event, Ames and Wazlawek (2014) found that, concerning negotiation interactions, even when interaction partners purposely pose false cues to enhance their potential gain, those who are appropriately assertive (by their ones' and their counterparts' report) accurately interpret them, and see themselves as having gone too far and having acted in an over-assertive manner (*i.e.*, the line crossing illusion effect).

2) The activation of core beliefs influences the processing of social cues. Bruch, Kaflowitz, and Berger (1988) found that individuals endorsing a self-schema for assertiveness processed information about assertive situations more easily, and attended to, coded, and retrieved more adjectives associated to assertive characteristics to define themselves and the social event. Additionally, assertiveness associates to more complexly interpreting the events and the diverse perspectives and motivations inherent to them, using flexible rules or schemas about appropriate action for discriminating, encoding and retrieving information (Bruch, Heisler, & Conroy, 1981). It follows that more socially efficacious response options are generated in addition to a more

positive evaluation of assertive behavioral scripts (Bordewick & Bornstein, 1980; Eisler, Frederiksen, & Peterson, 1978; Eisler, Miller, & Hersen, 1973).

On the contrary, individuals with lower levels of assertiveness seem to generally process social cues in light of self-devaluation. For example, they frequently over evaluate others' requests as reasonable (*i.e.*, not requiring assertive refusal); when they do find a request unreasonable, they still evaluate themselves as unable of effectively refusing it (Robinson & Calhoun, 1984). Instead, assertive individuals rated requests as less reasonable, saw themselves as more capable of making an adequate response to them, and expected more positive and desirable consequences arising from these effective responses of non-compliance, in comparison with nonassertive individuals, particularly when facing high or low legitimacy situations (Chiauzzi & Heimberg, 1986; Kuperminc & Heimberg, 1983). Concerning positive outcome expectancies for assertive responses, Ames (2008) found that higher social and instrumental outcomes were expected from appropriate/ medium levels of assertiveness, and that these expectancies, in addition to personal values on maintaining relationships, predicted self-reported assertiveness, either in experimental or natural contexts of negotiation; focusing on personal gains had also previously been associated to assertiveness, particularly to an assertive self-schema (Bruch et al., 1988).

Biases in the processing of social clues (either referring to low personal abilities to perform assertively or to the situation as not warranting an assertive response; Chiauzzi & Heimberg, 1986) may produce non-effective assertive behavior, or hinder it completely, making the assertive deficit a result of non-adaptive and subjective cognitive mediation between social cues and observable assertive behavior; assertive deficits may result from a negatively biased processing of social cues (Eceiza, Arrieta, & Goni, 2008; Rakus, 1991).

3) *The processing of social cues influences the circumstance-dependent cognitive, emotional and behavioral assertive products, which in turn mutually influence each other.* The observable products of the processing of social cues may be of cognitive, emotional, and behavioral nature; such complexity of products associated to assertiveness has been for long posited in relation to assertiveness and assertive training (Lazarus, 1973; Watanabe, 2006).

Nonassertive individuals have been found to hold the same number of positive and negative self-statements, which, when in conflict, annul each other, causing the individual not to act assertively (Schwartz & Gottman, 1976); this inhibitory effect had actually been referred to by the pioneer work on trying to understand assertiveness provided by Salter (2002). The internal conflict hypothesis was further confirmed by Heimberg, Chiauzzi, Becker, and Madrazo-Peterson (1983) in students, adult and clinical samples, and by Eceiza and colleagues (2008) in student samples. On the contrary, individuals who are able to evaluate situations using a more complex and abstract information-processing style report significantly more positive than negative self-

statements (Bruch et al., 1981), which foster their assertive practice (*i.e.*, a positive dialogue, representing optimism combined with the necessary attention to negative events; Bruch, 1981; Schwartz & Gottman, 1976). Generally speaking¹, endorsing more positive self-statements combined with a lower frequency of negative self-statements may facilitate assertive practice. Positive self-statements usually refer to self-confidence on the ability to behave assertively and of this behavior producing positive outcomes, namely admiration, respect, understanding and justice. In turn, negative self-statements refer to specific undesirable attributes or to the validity of the situation as requiring an assertive response (Rakus, 1991). Assertiveness is, therefore, a way of expressing a confident-self, which is not subjected to the interference of anxiety, particularly anxiety associated to social events, in an unjustified intensity (Alberti & Emmons, 2008; Arrindell et al., 1990; Wolpe, 1973). This confident self expresses him/herself in a straightforward, spontaneous, and context appropriate manner, and is able to recognize, analyze, manage, and express emotions (Alberti & Emmons, 2008). Such emotional expression includes communication of either positive emotions, arising from personal and social gains (*e.g.*, affection, affiliation or satisfaction) or negative, ones deriving from the hindering of such gains (*e.g.*, anger, anxiety or dissatisfaction).

Individuals presenting a more complex information-processing style have also been shown to perform more effectively in assertive situations, particularly in being able to persist and adapt their assertive behavior when facing more intricate, demanding and changeable interactions (Bruch et al., 1981). The assertive behavior should include verbal and non-verbal messages that are expressed concordantly and differently depending on different situational contexts (*e.g.*, refusing requests would include stating the personal opinion, explaining the motives for refusing, and expressing understanding of the frustration this may cause in others, whereas asking for favors might imply stating the problem, making a request and getting clarification on the contributions of each individual; Alberti & Emmons, 2008; Bishop, 2010). Both verbal and nonverbal cues have been found to be pertinent and used for judging assertiveness. Still, verbal cues were more used in judging the assertiveness of men and nonverbal cues were more considered in judging the assertiveness of women (Mast, Hall, Murphy, & Colvin, 2003).

The assertive verbal behavior or content of the message comprises positive self-affirmations, where the individual expresses his personal standing on any given event (*e.g.*, *I am furious about what you did* and not *You did it all wrong!*; Alberti & Emmons, 2008), using cognitive instead of emotional verbs (*e.g.* *I think* and not *I feel*; Rakus, 1991), and using the words necessary to get the message through (*e.g.* more words are needed to justify and defend personal

¹Bruch, Hamer and Kaffowitz-Lindner (1992) found that a positive monologue characterized by insufficient attention to negative events was more correlated with assertive effective behavior than positive dialogue, in situations of refusal where the other party was insistent. Assertiveness may require a more self-focused line of thoughts when facing this particular type of situation.

opinions or rights and less words are needed to make a compliment or critic). The assertive message usually includes reference to the personal standing on a given subject but also acknowledging the other persons' perspective on that same subject (Rakus, 1991). Accordingly, individuals adopting a more complex and abstract information-processing style produce verbal messages concerning their obligations and considerations for others that make them more effective in behaving assertively, particularly when interacting with loved ones (Bruch et al., 1981). This kind of affirmations is a way of valuing others and their particular perspectives on any event, by expressing ones' point of view as only a subjective standing on a factual event and actively enquiring and listening to the perspective of others. A willingness to reach a cooperative, negotiated and mutual perception of the event and how to deal with it is thus express (Alberti & Emmons, 2008; Bishop, 2010).

The assertive non-verbal behavior² or style of the message refers to the firm and intermittent eye contact, more direct when talking and less incisive when listening; to the spontaneous, natural, expressive, relaxed, and message appropriate facial expressions and body movements; to the well-modulated, uniform, fluid, relaxed, firm, and secure tone of voice; and to the leaning forward in the direction of others while keeping an appropriate distance (Alberti & Emmons, 2008; Rakus, 1991). The non-verbal assertive message demonstrates honesty, careful consideration, calmness, and respect, focusing on the message being transmitted and not on questioning or devaluing the message others are trying to convey. To do so, one speaks and listens alternatively, with a relatively short latency time between messages (Alberti & Emmons, 2008). This latency time is increased in individuals with lower levels of assertiveness, particularly when the situation requires negative assertion (Eisler et al., 1975), leading them to possibly entirely miss the opportunity to express themselves (Collins, Powell, & Oliver, 2000).

Though the cognitive, emotional, and behavioral dimensions of assertiveness have been defined (although some more than others), little research has considered them simultaneously. A few examples include Alden and Safran (1978) study that found that individuals who endorsed high levels of irrational beliefs (*e.g., I believe I should be competent at everything I attempt or I become more upset than I should about other people's problems and disturbances*) performed less effectively on a behavioral role-play assertion measure. In addition, Arrindell et al. (1990) using various clinical and nonclinical samples found that the more the individual practices assertive behaviors, the less he/she feels nervous or anxious in interpersonal events where such behavior is enacted (Arrindell et al., 1990). Furthermore, Vagos and Pereira (2010), in trying to validate the construct of the *Assertive Interpersonal Questionnaire*, found that the more the individual endorses assertive cognitions, the more likely he/she will practice assertive behaviors

² Eisler, Hersen, Miller and Blanchard (1975) found specific non-verbal behaviors to be differently associated to negative and positive assertion in psychiatric male patients. They also found that the expression of positive or negative assertion varied according to whether it was practiced toward female versus male and familiar versus unfamiliar counterparts.

and the less likely he/she will feel anxious or nervous in interpersonal events. Finally, the therapy outcomes results obtained by Valerio and Stone (1982) refer to concomitant cognitive and behavioral improvement following either behavioral rehearsal alone or cognitive restructuring alone, thus indicating that behavioral and cognitive change affect each other.

4) *The observable assertive behavior and the reactions of the interaction partner influence each other, resulting in mutually gratifying interactions.* While considering assertiveness has a personality trait, Mast and colleagues (2003) found that assertiveness was easily identified by observers, using a set of verbal and nonverbal cues, and that higher accuracy was found when judging assertiveness in women. Holding expectancies for greater instrumental outcomes arising from being assertive also resulted in assertive behavior that was easily recognized by others in negotiation contexts (Ames, 2008). Other than being easily identified by interaction partners, when a positive verbal message is expressed together with a respectful non-verbal attitude (*i.e.*, when assertiveness is practiced), positive exchanges between interaction partners and its subsequent benefits are optimized (Alberti & Emmons, 2008). Practicing empathic assertiveness will produce greater social rewards and elicit more favorable interpersonal reactions than either standard (*i.e.*, non-empathic) assertion or other communication styles, especially when dealing with a familiar interpersonal partner (Delamater & McNamara, 1986; Rakus, 1991). Assertiveness encompasses a balance between attaining personal and social gains, and is, therefore, preferable to passiveness or aggression, particularly in a long-term perspective (Marchezini-Cunha & Tourinho, 2010). Because it is a culturally adequate and respectful way of self-expression and self-affirmation (Alberti & Emmons, 2008; Rakus, 1991), it allows the individual to be part of a social group while honestly expressing him/herself.

Assertive responses are essential to the quality of human interpersonal relationships, contributing to increased comprehension or consideration from others, expansion of mutual respect, maintenance of continuously cooperative relationships with others, and acceptable interpersonal results of all interaction partners (Park & Yang, 2006). By freely expressing oneself, the personal sense of knowledge, self-efficacy and self-esteem is elicited; by actively and respectfully encouraging and considering the perspective of others, they will be more predisposed to cooperate and negotiate towards common goals. Concordantly, an optimal level of self-direction has been associated to enacting more considerate behavior towards friends and to feeling exposed to less interpersonal stress events (Watanabe, 2010). On the other hand, an excessive level of consideration for others was associated to mental unhealthiness, indicating that an optimal level of consideration for others may be the most advantageous for personal and social well-being (Watanabe, 2009). Finally, those who held expectancies for greater social outcomes resulting from being highly assertive actually achieved better negotiation outcomes for both parties involved (Ames, 2008)

5) The information retrieved from the interpersonal cycle contributes to the personal database of interpersonal core beliefs. As such, individuals endorsing a self-schema for assertiveness recalled having more frequently experienced social experiences involving assertive behaviors, and stated that they would likely behave assertively in hypothetical social situations (Bruch et al., 1988). Contrarily, individuals displaying appropriate assertiveness but who thought others evaluated them as over-assertive, would behave less assertively and settle in future negotiations, consequently not maximizing potential gains for him/herself and others. This effect was even stronger for those individuals who displayed subjective high concern for relational gains, who used future interactions as a way of (unnecessarily) repairing previous interactions (Ames & Wazlawek, 2014).

Conclusions

Inter and intra personal beliefs may distort the social feedback received from others in such a way as to confirm them, creating an interpersonal cycle where the demands of the social situation are the starting point to be analyzed and interpreted subjectively, whereas the behavior is the final and subsequent step to social information processing (Robinson & Calhoun, 1984). It is not enough to know how to behave assertively (Schwartz & Gottman, 1976); an assertive performance requires other personal and situational conditions (Derry & Stone, 1979), which should be considered in training assertiveness.

A theory and evidence-based cognitive assertive training

Assertive training has particularly focused on behavioral training, and in this form has shown discouraging therapeutic efficacy results (Derry & Stone, 1979; Rotheran, 1984). Given our current framework for understanding assertiveness, it follows that assertive training should be multidimensional and eclectic (Alberti & Emmons, 2008). This form of training has shown to be effective regardless of initial knowledge on assertiveness and assertive behavior (Valerio & Stone, 1982), and to promote higher levels of assertive practice and its generalization, less endorsement of negative self-statements and irrational beliefs, and lower levels of anxiety in interpersonal assertive situations (Derry & Stone, 1979; Jacobs & Cochran, 1982; Spence, 2003). The efficacy of assertive training programs should also consider an ecological and multidimensional perspective, by producing behavioral changes that are observable to others (Duckworth & Mercer, 2006), and contributing to the overall improvement of intra and interpersonal functioning, namely diminished social anxiety (Spence, 2003) and improved self-esteem (Stake, Deville, & Pennell, 1983). Such an intervention would be driven by cognitive-behavioral strategies, which are applicable to training assertiveness and target cognitive, emotional and/or behavioral inhibitors to assertiveness. When combined, these strategies may optimize the acquiring, maintaining and generalizing of assertiveness.

For acquiring assertiveness, the cognitive and emotional inhibitors and facilitators of this social skill should be targeted. To begin with, psycho-education should be considered, because it addresses the differences between assertiveness and other types of social behaviors, at the cognitive (*i.e.*, assertiveness is not a way of winning an argument or manipulating others into agreeing or conceding), behavioral (*i.e.*, assertiveness is a way of expressing oneself appropriately by considering the social and developmental demands one is daily faced with) and emotional levels (*i.e.*, assertiveness is a way of adequately managing and expressing personal positive and/or negative emotions) (Duckworth & Mercer, 2006). Let us go back to John. Let us imagine the lecturer reacted to his questioning by stating something like “Dear sir, this is not the time or place to pose questions”. John, thinking that his personal rights had just been questioned, immediately sets out to defend them, by replying something like “There is no need for that kind of reply. If you don’t know the answer to my question just say so. I’m sure I can find someone more competent who will be able to give me more clarifications”. By using this behavior, John is actually attacking the lecturer by questioning his competence (*i.e.*, focusing on the lecturer and his motivations) probably reacting to inner feelings of shame and anger, instead of, assertively expressing his discontent on the way he was replied to, after expressing a question in an adequate and respectful manner (*i.e.*, focusing on his perspective on the event). Thus, John may clearly benefit from psychoeducational training on the qualitative aspects that distinguish an assertive and aggressive response, either intra or interpersonally.

After being able to distinguish what would openly constitute an assertive response, John might be helped to recognize the cognitive and emotional products that had led him to be aggressive, and try to change them to facilitators of an assertive behavior. Cognitive restructuring techniques particularly tackle the cognitive biases that may be fundamental to assertive deficits, by identifying, questioning and replacing thoughts that characterize assertive deficit (*e.g.* The needs of others are more important than mine) with thoughts representative of assertiveness (*e.g.* My needs and the needs of others should be equally valued in challenging social events). These new alternative and more realistic thoughts should be practiced, firstly before or after the event and then during it (Rakus, 1991). John may come to realize that he has a tendency to think others are attacking him, even in the presence of little situational evidences. Such tendency might have resulted in thoughts like “Who does he thinks he is? He has no right to talk to me like that! I paid to be here so he owes me all the responses I need!” Still, after carefully reviewing the situation, John might recall that that same lecturer had previously answered questions, but had expressed a preference for doing so in a more informal setting, namely over coffee breaks. So, a more realistic thought would have been “He intends to answer my question latter, as he usually does. I will look for him then”. This new thought might, in itself, help John relax and lessen the intensity of his anger and shame. Moreover, relaxation techniques have also been considered suitable in assertive training, to prevent assertive behavior from being inhibited or impaired by high levels of anxiety

(or other emotional states). Relaxation should be applied as an incompatible response to these emotional states, as the trainee progresses in exposing him or herself to challenging social events, within and outside the training sessions (Duckworth & Mercer, 2006; Rakus, 1991; Wolpe, 1973). When cognitive and emotional products have become facilitators of an assertive performance, it is time for explicit assertive behavior training.

Such training directly fosters assertive behavior either in its overt or covert (*i.e.*, imagery) forms, by using strategies such as behavioral and cognitive modeling, behavioral practice with corrective feedback, and reinforcement. Cognitive modeling includes transmitting symbolic knowledge on what characterizes an assertive response in different situational contexts, whereas behavioral modeling implies observing a model behaving assertively and afterwards imitating this behavior. Following, the individual is encouraged to behave assertively in gradually more demanding social events, which should resemble the demands he/she will face daily. The effort and success of the trainee should be realistically reinforced, and constructive critics for the improvement of such performance are also advisable (Duckworth & Mercer, 2006; Rakus, 1991). Returning to John, even if is perfectly capable of posing questions in a culturally and situationally acceptable manner, he has shown difficulties in assertively expressing negative feelings and may also find it hard to take initiative if, eventually, he would have conceded to look for the lecturer during the coffee break. Thus, he might need training on the verbal and non-verbal components of assertive responses in each of these situational contexts, by being modelled, constructively corrected and called upon to practice assertiveness in increasingly diverse situations, thus maintaining and generalizing assertiveness.

We argued before that assertiveness feeds on assertiveness in a self-sustained interpersonal cycle, and there is some evidence to propose that that is true for other social behaviors (Horowitz, 1991). So, if the aggressive response would obviously bring about negative social consequences for John, namely alienation from fellow participants in that conference and his labelling as rude and disrespectful, a more assertive response would probably hold positive social consequences, namely a more individual contact with the lecturer, a complete clarification of Johns' doubts, and even a collaboration research for the future. In the first case, John would perceive confirmation of his tendency for hostile attribution of intent; in the second case, John would have fulfilled his personal and social goals, and thus, feel more inclined to maintain such a type of social behavior, and also to generalize it to other events presenting similar situational demands.

These intervention guidelines have seldom been transposed to structured and manual-based programs for training assertiveness. Such programs are usually (and should be) designed to specifically address the needs of the trainees included in the program (Alden & Safran, 1978; Bruch, 1981; Duckworth & Mercer, 2006; Eceiza et al., 2008), but this often leads to them not

being multidimensional. They often target only one of the components of assertiveness, neglecting the interdependence of cognitive structures, cognitive processes, and assertive cognitive, emotional and behavioral products. As exemplified by the case of John, considering all these components and their mutual impact may help to better plan the combined and successful use of various intervention techniques, thus maximizing the efficacy results of assertive training.

New directions for the study of assertiveness

Considering the evidence reviewed here on a cognitive model for assertiveness, we would argue that assertiveness is based on the premises that *What you see is what I think*, meaning that how and what one thinks about his/her interpersonal world (i.e., intrapersonal characteristics) is manifested in observable interpersonal behavior. Social information processing (SIP) models have precisely sought to understand how we come to socially enact the fruit of our cognitive structures, processes and products (Crick & Dodge, 1994), and, more recently, how emotions may interfere in this processing (Lemerise & Arsenio, 2000; see the first column of Table 1). This model has been consistently and thoroughly applied to explain aggression (for a review see de Castro, 2004), but scarcely used towards competent social behavior. Positive SIP (i.e., benign interpretation and competent social response construction and decision) has been directly associated with socially competent behavior in children, and indirectly with more positive and motivational perspectives on entering school, via socially competent behavior (Ziv, 2013). Likewise, prosocial behavior has been associated with a benign attribution of intent and socially competent problem solving strategies (Liable, McGinley, Carlo, Augustine, & Murphy, 2013), in addition to popular and unpopular children being differentiated based on their SIP (Feldman & Dodge, 1987). Also, prosocial adolescents were found to be less likely to attribute hostile intent or feel distressed in provocation events, evaluate prosocial responses more positively, and favor more relational than instrumental social goals when facing ambiguous hypothetical social events (Nelson & Crick, 1999).

None of these studies, nevertheless, focused specifically on assertiveness. More recently, an evaluation instrument for SIP has, for the first time, included items on assertive responses (Vagos, Rijo, & Santos, 2013), and thus may serve to better explore how SIP applies to these behaviors. For now, we can only infer what SIP would be like as applied to assertiveness (see second column in Table 1), based on previous findings on assertiveness that might fit with this model, taken from the works reviewed above (see third column in Table 1). As with any novel application of an old model, we rely mostly on the robustness of the model itself, at least until further evidence is presented. Besides, evidence that might be gathered concerning the utility of understanding and training assertiveness under a SIP perspective does not necessarily imply that other more recent models should not come to prove themselves as or even more useful (namely

third generation approaches to social behaviors; *e.g.*, Vavrichek, 2010). The evidence gathered so far is, nevertheless, compelling on pursuing the SIP perspective.

Further and more precisely applying the SIP model to explaining (and training) assertiveness will imply considering several variables that seem to be pertinent to the study of assertiveness but have, nevertheless, been neglected in the literature (see fourth column in Table 1). This constitutes a limitation to the certainty we may hold for the presuppositions inherent to an assertive SIP and, at the same time, a motivation for future research endeavors. Using experimental designs, where individuals would be faced with the need of behaving assertively, might be suitable for an accurate and precise description of what situational social cues are taken as indicative of the appropriateness of any kind of assertive response, and for more clearly distinguishing, for example, aggression from conflict / negative assertiveness. This type of design might also help to better describe the cognitive and emotional, including physiological, antecedents of different levels of assertiveness. In addition, it may provide important data on the interpersonal cycles that promote or inhibit present-day and future assertiveness, by analyzing the action and reaction equations that unfold between the various interaction partners. Correlational and inquiry-based works, as well as qualitative investigations, may be suitable to investigate how assertive individuals interpret and evaluate social scripts, and which social scripts are activated by them in different assertive situational contexts. Finally, longitudinal studies are paramount to draw conclusions on the direction of the associations between SIP and overt/ observable assertive behaviors.

Based on previous findings, we might expect that assertive individuals will endorse a balanced attribution style, given that they activate both positive and negative self-statements in social events (Heimberg et al., 1983); that assertive individuals will more accurately attend to and later recall both positive and negative situational social cues, and use them to positively evaluate assertive behavior options (Robinson & Calhoun, 1984); that assertive individuals will activate more assertive scripts from memory (Bruch et al., 1988), and will present low levels of anxious physiological arousal (Wolpe, 1973); that assertive individuals will better evaluate the likelihood and comfort felt when behaving assertively (Ames, 2008), as well as the social goals to be fulfilled by behaving assertively (Ames & Wazlawek, 2014), and will, consequently tend to choose and apply assertive behaviors to social interactions (Eisler et al., 1978). Also, we would expect each step of SIP to incrementally contribute to more thoroughly explain assertiveness, especially when the SIP and the overt assertive behavior refer to a specific situational context (Dodge & Price, 1994). Finally, we believe the observable assertive behaviors and SIP will mutually reinforce each other over time, with this cycle probably starting with assertive behaviors in early childhood (Liable et al., 2013). Behaviors are more likely to be innate than social cognitions or schemas, which are said to be constructed based on meanings that are consistently taken from early

interactions (Young et al., 2003) and serve as a lens through which subsequent social events are encoded and interpreted (Crick & Dodge, 1994). Even so, we would argue that as children develop the necessary social cognitive skills and grow into adolescents and adults, the way they process social information will be determinant in how they behave in their ever more diverse and complex social contexts. Therefore, behavioral change may more easily be maintained and generalized if assertive training also considers the cognitive facilitators of this behavior (*i.e.*, the assertive SIP).

SIP-based general intervention guidelines have been presented (Boxer & Dubow, 2001). They may be the starting point upon which to suggest a SIP-based assertive training, considering each of the several steps of SIP where inhibition of assertiveness may be found (see last column of Table 1). To begin with, non-assertive individuals should understand their peculiar SIP style and how it may translate into their common interpersonal behavior, in specific or generalized situational contexts; if necessary, core interpersonal beliefs may be restructured, by highlighting their developmental value that ceased to exist when personal and social circumstances changed. Attention biases associated with a biased SIP may be targeted by experimentally training the engagement in neutral or positive cues and the disengagement from negative ones (*e.g.*, when assigning emotions to facial expressions). Interpretation biases are usually dealt with by cognitive restructuring, to which we would suggest adding the exposure to diverse social situations and interpersonal motives, so that social cues might be generally looked at from a more diverse and optimistic perspective. For acquiring assertive behaviors, we would suggest combining several strategies: psychoeducation on the verbal and non-verbal characteristics of assertive behavior, valuing its quality over its quantity; exposure to significant models practicing assertive behaviors in diverse but meaningful social contexts, either by real-life or video observation; role-play behavioral training, either by portraying oneself or the interaction partner, and using videofeedback as a way of improving ones' assertive behavior and fostering self-efficacy; and reframing of personal/ instrumental *versus* social goals and of the intra and interpersonal consequences of diverse interpersonal behaviors. Finally, the response decision should be outlined within a framework of shared humanity and responsibility (*i.e.*, achieving the best possible outcome for all). The interaction should be processed posteriorly in a balanced manner (*i.e.*, including both negative and positive features) so that new realistic and adjusted social scripts may be developed and integrated in the personal dataset. Agents taken from the social contexts where the individual is moving (namely, family, peers and teachers) may be recruited as allies for assigning interactions with a positive and reinforcement meaning.

Of course, applying such a strictly cognitive intervention warrants caution; CBT has proven to be contra productive with individuals' presenting certain characteristics (*e.g.*, obsessive-compulsive tendencies, Linden, Uise, & Aupt, 2014). So, as with any other

psychological intervention that aims to be evidence-based, such intervention strategies should be applied after being adapted to the individual, social and cultural specificities of any given individual. In addition, according to the most recent developments on the SIP model, it would also be appropriate to help non-assertive individuals recognize and label their emotions and the emotions of others (*i.e.*, affective and cognitive empathy), as well as to help them manage the intensity of emotional arousal so as to prevent it from leading to an impulsive (and possibly undesired, ill-advised and maladjusted) behavior. At the same time, promoting empathy will contribute to the recognition of a shared human experience, according to which mutually beneficial response options should be chosen and enacted.

Referring to the cultural specificities of assertiveness, what constitutes an assertive response varies within different societal or cultural backgrounds (see for example, Korem, Horenczyk, & Tatar, 2012 or Yoshioka, 2000). Concordantly, assertive training strategies may prove more effective if tailored to the societal or cultural backgrounds of the participants (see for example, Dwairy, 2004 or Wood & Mallinckdrot, 1990). Moreover, adjusting biased SIP may only produce immediate changes on behaviors concerning the situational contexts towards which SIP was adjusted (Dodge & Price, 1994), even if future generalization may be expected as new social encounters produce cues that are unbiasedly processed. Such cultural and situational experiences provide not only the present circumstances against which a competent assertive behavior will be judge, but also represent the consistent and stable meanings that developmentally framed the core interpersonal beliefs according to which current social information will be processed. Therefore, in adjusting SIP and in training competent assertive behavior, it should always be considered the cultural and situational surroundings where the behavior has been and will be practiced and appraised by others, and generalization to the current inter and intrapersonal circumstances should be explicitly promoted.

At the individual level, and given that assertiveness is particularly unstable and in constant need of actualization in relation to new life and circumstantial demands, a developmental perspective on its training also seems worthwhile. Particularly, it seems that SIP may only influence behavior once interpersonal schemas have been defined (Libale et al., 2013) and the appropriate cognitive developmental skills (*i.e.*, meta-cognition) are developed. So, a behavioral analysis on assertiveness and assertive training (for a review see Marchezini-Cunha & Tourinho, 2010) may be the optimal choice for young children whereas a cognitive perspective may be recommended for older children, adolescents and adults. Currently, assertive training must consider yet another contextual demand faced by old and new alike: the online social networks. If and how they contribute to personal and social adjustment is still unclear, with different findings being presented over time, and for different types of usage or individuals

(Kraut et al., 2002; Valkenburg & Peter, 2009), calling for a new pathway of investigations relating to *online* assertiveness and its training.

Without a doubt, *No man is an island* even today, and we still strive to initiate and maintain mutually gratifying relationships and to achieve social and instrumental gains, using old and new channels of interaction. Assertiveness is paramount in achieving such gains, calling for a continued necessity of updating our knowledge on the subject, considering what we still need to know to make balanced thoughts reflect in empathic assertive behaviors when facing an ever-changing social world. **The cognitive perspective presented in this work may serve to instigate updated research on assertiveness, and offer a new lens into the comprehension of assertiveness, and into the treatment of subjects who face impairing difficulties in simply being themselves.**

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Figure 1: A cognitive-based model of the processes that occur when an assertive individual faces a social event

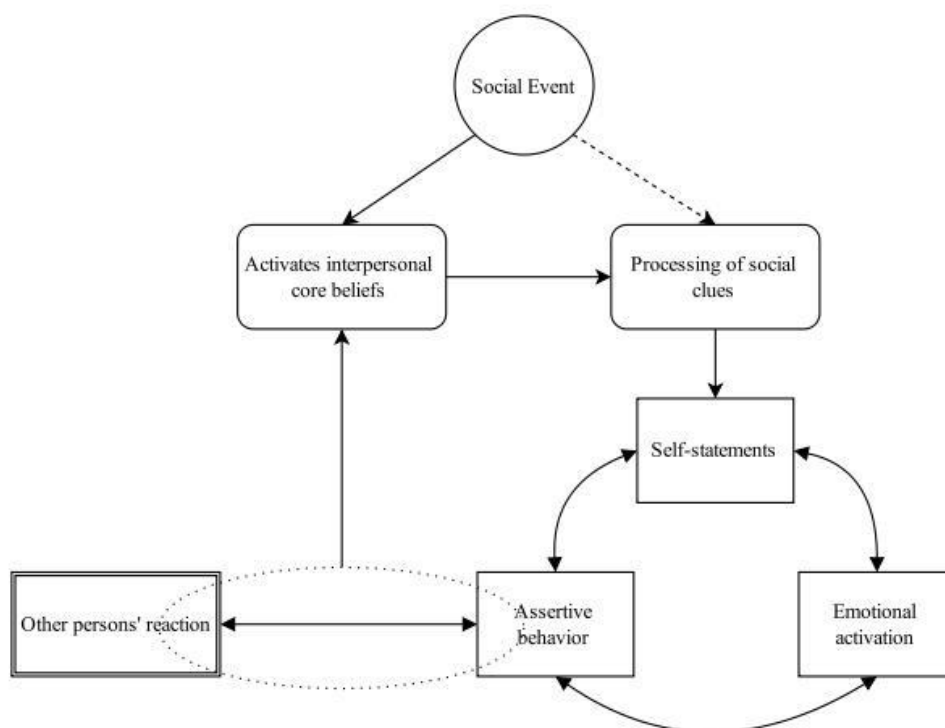


Table 1: Applying the social information processing model to the study of assertiveness

Steps of SIP	Proposed assertive-SIP	Previous findings	Research questions	Intervention guidelines
1 Social Event	<ul style="list-style-type: none"> • Accurate and generalized cues are taken from the event • Previous experiences with similar events favor assertiveness 	<ul style="list-style-type: none"> • Social cues may refer to different contexts for assertiveness • Previous positive social outcomes taken from being assertive 	<p>Δ What social cues are distinctive between different situational contexts for assertiveness?</p>	<p>∇Developing and accepting an idiosyncratic model of past to present social experiences</p>
2 Encoding Processes	<ul style="list-style-type: none"> • Perception • Attention • Memory <p>(Influence of previous emotional states)</p>		<p>Δ What social cues will preferably be attended to and memorized?</p> <p>Δ How do previous emotional states interfere with encoding processes?</p>	<p>∇Attention training</p> <p>∇Balanced post-event processing (emotional literacy and management)</p>
3 Representation Processes	<ul style="list-style-type: none"> • New social cues are interpreted in light of old assertive social scripts • Balanced thoughts on the social event <p>(Influence on subsequent emotional states)</p>	<ul style="list-style-type: none"> • Assertive individuals will activate more positive than negative thoughts in social events 	<p>Δ Will assertive individuals endorse a more benign, neutral and/or less hostile or threatening attribution style?</p>	<p>∇Recognize the link between interpretation and (inaccurately perceived) social cues</p> <p>∇Reframing interpretation in light of more realistically perceiving social cues</p>
4 Response search and evaluation	<ul style="list-style-type: none"> • Activating and evaluating assertive behavior scripts: personal congruence; personal and social goals/ consequences; self-efficacy and moral value 	<ul style="list-style-type: none"> • Assertive individuals will have more previous scripts on assertive behavior 	<p>Δ Will individuals with different levels of assertiveness activate different types of scripts?</p> <p>Δ How and why assertive individuals favor assertive scripts?</p>	<p>∇Exposure to different types of social behaviors and their intra and interpersonal consequences</p> <p>∇Goal reevaluation</p> <p>∇Behavioral training and experiment</p>
5 Response decision and enactment	<ul style="list-style-type: none"> • Frequency of situation specific assertive behavior, including its verbal and non-verbal components 	<ul style="list-style-type: none"> • Assertive behaviors will differ according to individual, situational, and cultural contexts 	<p>Δ What verbal and non-verbal behavioral markers will distinguish between assertive and aggressive responses?</p> <p>Δ How do we evaluate the quality of assertive behavior, other than observation?</p>	<p>∇Deciding on humanity</p> <p>∇Balanced post-event processing</p> <p>∇Making allies from contextual partners</p>

Note: SIP: Social Information Processing