# Brief Acceptance-based Protocols Applied to the Work with Adolescents

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## Abstract

This article describes three brief acceptance-based protocols that were implemented with adolescents presenting psychological barriers to cope with different issues. The first was a values-acceptance protocol applied to adolescents to promote safe sex behaviours. The second protocol was applied to young chess promises to improve their chess performance. The third protocol was applied to children showing impulsive and antisocial behaviors. In all cases, the outcomes were satisfactory. Besides the clinical significance, the implementation of all three protocols served to further refine the acceptance-based clinical methods used in the work with our clients, and to better explore the verbal processes underlying the efficacy of such methods.

*Key words*: acceptance and commitment therapy (ACT), acceptance, defusion, brief protocol, adolescents.

## Resumen

El presente trabajo describe tres protocolos breves basados en la aceptación que fueron aplicados a adolescentes que presentaban barreras psicológicas para afrontar situaciones diferentes en su vida diaria: el primero se aplicó a adolescentes para promover hábitos de conducta sexual protegida; el segundo, a jóvenes promesas del ajedrez, para mejorar su rendimiento; el tercero a adolescentes con conducta antisocial e impulsiva. En los tres casos, los resultados de la aplicación de los protocolos fueron satisfactorios. Más allá de la significación clínica, estos protocolos sirvieron para mejorar los métodos clínicos utilizados con nuestros clientes, y para ahondar más en el estudio de los procesos verbales a la base de la eficacia de dichos métodos.

*Palabras clave*: terapia aceptación y compromiso (ACT), aceptación, valores, defusión, protocolos breves, adolescentes.

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Acceptance and Commitment Therapy (ACT) (Hayes, Stroshal, & Wilson, 1999) has been regarded as a contextual (and, necessarily, functional) therapy. ACT is focused in changing the function of psychological discomfort (e.g., pain, fear, worries, memories, and whatever other private event) whenever it gets in the way towards valuable goals and directions as defined by each individual. In other words, the focus in ACT is to change the way the person relates to their private events, which may, in the long run, reduce the frequency or intensity of the painful thoughts and/or memories. This side effect, however, is not the core of the work with the clients. The clinical methods to achieve such goals involve contextual changes and take the form of metaphors, paradox, and experiential exercises. Although different in form, all methods in ACT have the same function, that is, any movement done in the clinical setting is in the service of having the person act in chosen and valued directions. Clarifying such directions is at the heart of accepting discomfort, for which defusing from aversive private contents is a necessary ability. The critical components of ACT are described and divided in several ways in the various ACT books published so far (e.g., Dahl, Wilson, Luciano, & Hayes, 2005; Hayes, *et al.*, 1999; Hayes & Stroshal, 2004; Luoma, Hayes, & Walser, 2007; Wilson & Luciano, 2002).

The use of acceptance-based clinical methods is being widely expanded, in part because of the attractiveness and logic of acceptance philosophy, in part because of the evidence accumulated on their efficacy. Nonetheless, the strict scientific analysis of why this therapy is effective and whether or not the evidence accumulated is sufficient to fulfil the criteria for empirically supported treatments, yields lights and shadows. The discussion of these, however, is not within the scope of the present paper (for a discussion, see Hayes, Luoma, Bond, Masuda, & Lillis, 2006; Hofmann & Asmundson, 2008; Ost, 2008).

Very briefly, a) ACT is based on the research conducted under the functional conceptualization of behavior and cognition (see, Hayes, Barnes-Holmes, & Roche, 2001). b) According to this conceptualization, ACT has provided a useful understanding of psychopathology in terms of destructive experiential avoidance (Experiential Avoidance Disorder, EAD, or more simply said, psychological inflexibility). EAD is said to occur in cases where the regulation of thoughts and other private events (emotions, memories, body sensations) finally limit the person to act in the valued direction. Destructive experiential avoidance has proved critical across most human psychological problems and disorders (see for a review, Hayes, Wilson, Gifford, Follete, & Strosahl, 1996; Luciano & Hayes, 2001. See also, Törneke, Luciano, & Valdivia Salas, 2008). c) Controlled trials have shown the efficacy of ACT applied to many problems, disrupting or altering the destructive regulation of private events (e.g., see Hayes, *et al.*, 2006 for a review). And d) the relevant ACT components, such as values clarification, acceptance, and defusion, have been isolated in basic research (for example, Gutiérrez, Luciano, Rodríguez, & Fink, 2004; Hayes, *et al.*, 2006; Hayes, Bissett, *et al.*, 1999; Healy, *et al.*, 2008; Levitt, Brown, Orsillo, & Barlow, 2004; Luciano, Molina, *et al.*, 2005, 2009; Masedo & Esteve, 2007; Masuda, Hayes, Sackett, & Towhig, 2004; Masuda, *et al.*, 2009; McMullen,*et al.*, 2008; Páez Blarrina, *et al.* 2008a,b).

All in all, additional basic-applied experiments are still necessary to better isolate the conditions under which the clinical methods included in ACT do work; more specifically, to identify the in-session clinical processes that make a difference both in and outside specific clinical interactions, and also, to isolate the different interactions involved in any single ACT method producing the transformation of functions of the private events. This is the context for the series of basic and applied experiments conducted in our lab within the present series of brief ACT protocols were conducted.

The aim of this paper is to provide the reader with an outline of three of these protocols applied to the work with children and adolescents. This is done *à la* multiple-exemplar training to promote the comprehension (or the reader's abstraction) of the relevant ACT components. In so doing, we present three protocols that were applied with different formal goals, albeit with common functional components. The first is applied to adolescents to promote safe sexual behaviors. The second was applied to "bright young hopes" chess players. The third one was applied to adolescents who showed impulsive and antisocial behaviors.

## Values-acceptance Protocol Applied to Adolescents to Promote Safe Sexual Behaviors

Two exploratory studies (Gutiérrez Martínez, Bermúdez, Luciano, & Buela Casal, 2007; Gutiérrez Martínez, Teva, Bermúdez, Luciano, & Buela Casal, 2007) provided preliminary evidence that brief ACT-based protocols may be useful in the promotion of safe sex behaviors among normal adolescents. In our first study (Gutiérrez Martínez, Teva, *et al.*, 2007), the relationship between a measure of cognitive fusion related to sexually transmitted diseases/human immunodeficiency virus (STD/HIV) and risky sexual behaviours was assessed among a wide sample of 1,394 Spaniard adolescents aged 13-18 years. Results showed that adolescents who were fused to thoughts about the inconvenience of condoms or other wrong beliefs about the infection of HIV (i.e., "condom minimizes pleasure", "love protects you from HIV", "condom use is embarrassing" or "cool people do not transmit HIV") engaged in more risky sexual behaviours (sex with occasional partners, while on drugs and without condoms). In a second study (Gutiérrez Martínez, Bermúdez, *et al.*, 2007), forty-five adolescents aged 14-17 years were randomly provided with either an HIV knowledge-based protocol (henceforth, INFO) or an HIV acceptance-based protocol (henceforth, ACT). Each intervention (INFO/ACT) consisted of one 90-minute group session implemented at the classroom in the high school where participants attended. The INFO protocol was aimed to enhance awareness about the risks related to STDs, especially HIV, through usual didactic materials. The ACT protocol included identical information contents, but these were framed in the motivational context of adolescents' personal values, with an additional defusion exercise.

Data of self-reported sexual behaviors and other measures were collected at baseline, post-intervention and 6 months follow-up. Overall, results showed that both protocols increased HIV-knowledge and reduced HIV/AIDS prejudice among the

adolescents. Most participants in both conditions did not report to practice penetrative intercourses and, consequently, the impact of the interventions on condom usage could not be proved. However, those participants in the ACT condition who practiced sex without penetration reported significantly fewer sexual partners and less use of drugs before or during sex than adolescents in the INFO condition. Although both protocols had a significant impact to increase the perception of HIV risk when having unprotected sex with an occasional partner, only adolescents in the ACT condition reported significantly higher perceptions of HIV risk regarding unprotected sex with an steady partner. These preliminary results support the utility of ACT-based strategies as a component of the HIV prevention interventions with adolescents presenting non-penetrative sexual intercourses. What follows is the description of the ACT-based protocol, whose elements were adapted from previous brief ACT-based experimental/clinical studies (Luciano, *et al.*, 2003, 2004,2005; Páez Blarrina, *et al.*, 2008a) and case-studies protocols (Hayes & Stroshal, 2004; Luciano, 2005). The elements in the protocol will be described in the same order they were presented:

1. The first element was the *identification of personal values* as the early reference point for the HIV workshop. The experimenter started saying:

   "During this workshop we are going to talk about how to maintain a healthy sexual life and prevent the STD/HIV infections in the future. But before starting to talk about STDs and HIV, we need to equip ourselves, same as when we decide to spend a day out in the beach. The first thing we must do is to prepare our bag with a towel, sun lotion, a ball, a book, a cap, etc. We are going to need two things during this workshop: a compass and a telescope. Let me explain…"

   Then, each student was given the "values compass worksheet" (see, Dahl, *et al.*, 2005). This is a measure of values in which, surrounding a compass, there are ten box corresponding to ten value domains, including family (other than parenting and intimate relations); marriage/couples/intimate relations; parenting; friendship; work; education; recreation; spirituality; citizenship; physical self-care. The students were said that the compass had to do with the things they really like or love, with their intentions. Firstly, students were asked to rate the importance of the ten value domains ("areas of their life they may find important") on a 1-10 scale. It was emphasized that there was not a right or a better answer and no one would ever see theirs answers –the compass was just a way to prepare themselves for the workshop, similar to prepare the bag for the beach. When the students had completed the ratings, they were asked to imagine they had a "telescope" through which they could see themselves at the age of 25 years old. They were asked to write down the ways they would see themselves living and doing things on each of the domains they had rated as very important. For example:

   "If you have rated the friendship as an important domain, imagine that you could see yourself, with the help of the imaginary telescope, in your mid twenties while being

the best friend possible, how would you see yourself behaving toward your friends? Please, briefly describe in the compass sheet the type of friendships you would most like to build in your middle twenties."

When the students had completed individually the compass worksheet, the experimenter told them:

"…we are going to use the compass for the rest of the workshop. You may decide to use the compass outside, perhaps the compass stays with you forever. Anyways, be aware of something: each step you make brings you closer or farther from one or several compass domains."

The experimenter asked for volunteers to discuss specifics:

"Now, we are going to talk about HIV and STD and how the compass may help you prevent AIDS and STD, how some safe sexual practices are connected with your intentions and how other risky practices put yourself far from the important things in your life."

2) Then, the specific *HIV information-based contents* were introduced: Information on STD, HIV, AIDS, retrovirus, immune system; HIV transmission; diagnosis and HIV test; consequences of HIV infection; ways of infection and sexual risk behaviours; HIV risk-reduction strategies such as abstaining from sex, using condoms consistently, and having fewer sex partners.

3) The third component was aimed *to link the HIV risk-reduction actions with the areas participants had previously stated as valuable* (e.g., job, partner, friendships, etc). The link between immediate actions (i.e., condom use) and remote and probabilistic positive consequences (valuable goals) would likely transform the functions of present barriers (e.g., "using condoms is not fun"), so that participants kept doing now what, in the long run, would likely provide positive reinforcement.

The experimenter (E) said: "…so tell me what actions concerning your sexual practices bring yourself closer to the things that you want for your life in the future?"
The students (S) responded something like: "abstaining from sex, using condoms regularly, and having fewer sex partners."
E: "And tell me what sexual practices would bring yourself farther away from the things that you want for your life in the future?"
S: "having sex with penetration without condoms."
E: "Well, and why do you think some teenagers do not use a condom when they have sex, even when they know the risks very well?" The experimenter wrote down all the reasons that students gave in a board; when they did not respond, the experimenter prompted more reasons typically given by teenagers for not using condom. For example, because they feel embarrassed to ask to his/her partner to use a condom; because they are afraid of looking like a prudish; because there is no risk and they will not be infected; because they are afraid his/her partner does not like using condom; because their partner would think they have been cheating on them; because true love does not

need condoms; because interrupting the act to put a condom may diminish the excitation; because their partner is not infected… Then, the experimenter continued: "so it seems that some teens, even when they know the high risk of not using condoms and the short and long-term consequences, they decide not to use them for different reasons (the experimenter pointed to the reasons written). But let me ask you something: have you ever really wanted to do something and finally have not done it? Have you ever thought that you would do something and finally never did it? So it seems that we can act as we choose even when our thoughts and sensations say the opposite. For example, have you ever heard of some beginner actor or singer who feels all embarrassed of making a fool of himself, who feels terrified of performing in public, and however, goes to the stage and does his best? Why do you think he does not quit even feeling so terrified?"
S: "because he needs to do it if he wants to be an artist."
E: "Exactly, because feeling embarrassment or anxiety, rehearsing, doing mistakes, and perhaps feeling terrified is an step towards the life he wants to have, it would be an step guided by his compass… Have you ever been in a somehow similar situation where you have felt bad for a while in order to achieve something important, something you value?" If the students did not respond, the experimenter prompted one example: "For example, visiting the dentist is uncomfortable in the short run, you do not want to do it, but you do it because your tooth health is important." Immediately after that, she asked for more examples. Once the students had given some examples, the experimenter continued: "What if it was necessary to be willing to feel embarrassed, nervous, stupid, etc in order to take safe sex decisions? Would you be willing? This is what we can do in the case you choose to do such steps…"

4) The fourth component was aimed *to practice defusion* from unpleasant thoughts and feelings that may accompany safe sex decision-making (e.g., anxiety, embarrassment, guilt, frustration, etc.). This exercise was based in Luciano (2005) and contained a compound of experiences, typically separated in ACT preparations. The aim of this exercise was generating the conditions to experience the discomfort or unpleasant thought and to discriminate between the person who is having the thought or sensation, and the contents thought and felt.

The experimenter said: "Now close your eyes and follow my voice. First, I want you to notice the different sounds you can hear around you. Perhaps you hear voices from other classes around us. See if you can picture the room around you. Try to picture where the chairs are, the board, the door, etc. See what else you can notice as you picture the room. Notice the position of your body in the chair, notice the feel of your clothing, where it touches your skin. Now notice your breathing. Now I want you to picture yourself in your last sexual encounter. Look around and see where you were. Look down at your body and notice what you are wearing. Notice the way you are feeling and the thoughts you are thinking. Imagine that you decide having sex with penetration and you suggest your partner to use a condom. It does not matter if this is not something you have done. Just imagine that right now you are in that situation. Imagine that your partner suggests having sex without condom, that you both are healthy and nothing will happen. Notice the feeling and thoughts that you are having now. Put all these thoughts and sensations in front of you, look at them and let them

go without any resistance. If you find yourself trying to think of something else, return to the exercise and notice, how it feels to heard your partner's words, and allow yourself to experience your thoughts and feelings as completely as you are able. Perhaps some of you feel embarrassment in this situation, others feel confidence, others feel discomfort… Let me ask you something: Who is realizing that you are having the feelings of embarrassment, confidence, discomfort, etc?" The students told that it was them who were noticing these feelings. "Now, I want you to do one more thing. I want you to write down in an imaginary paper one of the feelings or thoughts coming right now when you imagine being in a safe sex encounter. Do you have it? Please, do write it in the imaginary paper. Now I want you to see yourself crumpling the paper up and putting it in your pocket. Well, focus on other thought you are having right now and do the same. Please, repeat the exercise with whatever thoughts show up right now and put them in your pocket… It seems that you have room enough to have and to notice all these thoughts and feelings, some of them you like, some others you don't like. Do you want to be in charge, or do you want your thoughts and feelings, like 'nothing will happen, I can control,' be in charge during a sexual encounter? (The students said "I want"). So in order to put your feet in the direction of your intentions in your compass, of the life you want to have in your mid twenties, what can you do when you are in a sexual encounter and, for example, you have the thought 'we don't need a condom because my partner does not have any infection'? Do you think you can put this thought in your dress pocket and make a safe sex choice? If you, instead of your thoughts or your feelings, are in charge, then you can 'make room' for feelings of embarrassment, confidence or whatever, you can put them in your pocket while you choose the best safe sex action."

5) The fifth element had to do with a *commitment exercise*. Each student was asked to write down in the compass worksheet what sexual practices they would adopt in order to be closer to the things they wanted for their life. Volunteers who wanted to talk about this out loud were encouraged. Then, the experimenter said:

"I'm wondering whether you would like to make a commitment to making safe sex choices, knowing that you may feel embarrassment, confidence, anxiety, discomfort when you choose to use a condom, or to abstain from sex… The commitment is not about not having or indeed having a particular thought or sensation. The commitment is about choosing what to do. Rate in your compass worksheet how committed you are, from 1 to 10, to moving forward what is important for you even in the presence of uncomfortable moments."

## Acceptance-defusion Protocol Applied to "Bright Young Hopes" Chess Players

This study compared the effects of a brief acceptance-based protocol (ACT) vs. a no-protocol condition (see Ruiz & Luciano, in press for more details). The ACT protocol was implemented with seven bright young hopes, 14 to 20 year old, who were selected by the Spanish Chess Federation to participate in the European Youth Chess Championship. The protocol lasted three hours and a half and was applied, in group format, in three sessions during a 5-day chess intensive chess training sessions. Other

7 European bright young chess players were matched and served as control condition. Participants in the control condition did not receive any type of intervention and did not have any contact with the experimenters.

The main dependent variable was the ELO score in the tournaments during the previous and the following 9 months. ELO score is a performance index broadly used by the International Chess Federation and is calculated by mathematical procedures. Other dependent variables were experiential avoidance as measured with the Acceptance and Action Questionnaire-II (AAQ-II) (Bond et al., under review) and the Chess Limiting Reactions Questionnaire (CLRQ, a specific measure of experiential avoidance in chess tournaments, elaborated for these studies).

Results showed that the ACT brief protocol improved the chess performance of 5 of 7 participants in the ACT condition, and that no chess-player in the control condition reached the established change criterion. The difference in ELO performance between conditions was statistically significant at follow-up but not at pre-intervention. In addition, the correlation between the decreases in level of experiential avoidance (CLRQ) and improvement of chess performance was strong. Furthermore, the improvement of chess performance, after the implementation of the acceptance-based protocol, was stronger in those participants who showed, previously and during the competition, more level of experiential avoidance. What follows is the description of the protocol (see details in Ruiz & Luciano, in press).

The focus of the protocol was to teach participants to react with flexibility to the worries, fears, etc. (i.e., psychological barriers) that they had during the chess tournaments. The first part consisted of a brief defusion protocol and was implemented the second day of the chess intensive workshop. The second part was implemented the fourth and fifth days of the intensive chess sessions, and consisted of a hopelessness, acceptance and defusion protocol.

*First part: Defusion Protocol*

During the first day of the chess sessions, the experimenter encouraged participants to play a series of very rapid and difficult computer chess games while they heard lousy noises and sentences like, “I am not doing well,” “I do not have time,” “time is almost over.” During the second day, participants were invited to say aloud the thoughts and sensations that showed up during the games, and to establish connections between these thoughts and the ones they typically had during real competitions. Then, they were invited to do several defusion exercises, as multiple-exemplar training, to promote the self-as-context differentiation. Below this process is described.

1) *Participants were first asked to think of situations in which they did nothing with thoughts or sensations*. For example, they were asked to experience, right there, how they felt the trousers or skirt on their skin..., and do nothing but noticing the sensation… and, then, responding to who was having the sensation. The same was done in the case they were feeling itch, noticing it… doing nothing… and responding to who was having such a feeling. The same

with noticing the hands leaned…, with noticing the breathing. This was repeated with whatever thought and sensation they might be noticing in such a moment.

2) *Participants were then invited to write on an individual card the thoughts they did not like having while being in chess competitions.* They wrote, for example: "I am going to lose," "I am not sure what it is the best move," "I have to win the game," "My rival is too strong," "I cannot understand the actual position." Experimenter then asked to look at the thought as written in the cards and to do nothing but greet their thoughts. Then, they were invited to do the same with any thoughts they were having right there.

3) *Participants were invited do the autumn and the leaves exercise* (Pankey & Hayes, 2004, p. 320; Wilson & Luciano, 2002, p. 216). They were asked to close their eyes and, again, to think about the thoughts they had while playing chess. Then, they were asked to imagine a big tree near a river with leaves falling on the river stream. Experimenter asked participants to put one of the thoughts they had written before in a leaf, and leave it flow along the river. Participants were encouraged to do the same with any thought or sensation that showed up while doing the exercise, and when the exercise was over, to do the same next time they played the computer chess games.

*Second Part: Creative Hopelessness, Acceptance and Defusion Protocol*

It focused, firstly, in the creative hopelessness experience and, secondly, in exercises to defuse from problematic thoughts or feelings. The following paragraphs illustrate these components.

4) *Creative hopelessness experience was promoted.* (...) by asking about what they usually did when a worry (e.g., "If I lose this game then I will not be able to play the next one"), or a disturbing thought (e.g., "I've done a mistake, I should have played the other move") showed up during a game, and what they got both in the short and in the long run as a result. They reported they usually did such things as wasting time re-thinking the moves until they felt confident, or playing in a defensive way; which in the short run made them feel in control; but at the end of the match did not translate into good results necessarily (e.g., "at the end of the day, I don't do very well," "I'm losing more frequently than when I was younger," "I don't really pay attention to the game positions because I'm too afraid of losing the game" etc.).
The metaphor of the man in the hole (see, Hayes, *et al.*, 1999, p. 101; Wilson & Luciano, 2002, p. 128) was then introduced as analogue of what they were doing. This metaphor established that if a man falls in a big hole and tries to go out by digging, then, although he believes he is doing the right thing to go out, finally the hole becomes bigger. The experimenter asked whether having fear of losing the game and behaving as they did when this happened, was somehow like falling in a hole and trying to get out by digging deeper.

The participants connected with this metaphor: same as the man in the hole, although making defensive moves or re-thinking the next move (i.e., digging) seemed right at first, in mid-long run this served to have more worries and play poorly.

5) *When the participants have established the connections between their situation and the metaphor, then, a new metaphor was incorporated, the swamp metaphor* (Gutiérrez, *et al.*, 2004; Páez, *et al.*, 2008), to let the participants to experience that…"sometimes, it is necessary to go through a dirty swamp full of undesirable things in order to follow the path to the things we most want. In such situation, we have two choices: we can choose not to go through the swamp, which necessarily put us away from the things we most want; or we can choose to work for the things we most want." They were asked to give some personal example similar to that situation. Participants were then asked about the swamp situation: "What would you choose, the things you want or not having fear?" Upon responding "I would choose the things I most want," and being asked what would happen then, they responded they would have dirty sensations, fear, and so on. Then, they were asked whether this had something to do with playing randomly when the felt fear of losing the game. Once again, the connections were done and the experimenter asked if they were willing to do something different with fears and worries.
In order to help participants cope with such sensations (e.g., fear of losing the game), the experimenter invited them to practice the exercise they did during the first session, and introduced other exercises to physicalize the fear. This way, participants had multiple opportunities to experience their thoughts and feelings, and to differentiate between such contents and the person having them (that is, to differentiate the dimensions of the socially-constructed self, see Barnes-Holmes, Hayes, & Dymond, 2001; and Luciano, Valdivia Salas, Cabello, & Hernández, 2009). What follows is a brief description of these exercises.

6) *Physicalizing psychological barriers* (Wilson & Luciano, 2002, p. 240). To start, walking towards a corner in the room was made equivalent to making wanted moves during a chess match. Participants' task was walking toward the corner. Every time the participant took one step in this direction, the experimenter stepped on his way as if he was their fear to lose the game, their fear to play wrong, etc. This was done until the subject took the therapist by his hand and walked to the corner with the therapist by his side. This meant doing what they wanted to do (although not always meant winning the game) carrying their fear with them, instead of doing moves to confront or to eliminate the fear or any conflicting thought.

7) *Physicalizing the Bus metaphor*. The multiple-exemplar defusion training ended with the physicalization of the bus metaphor (Hayes, *et al.*, 1999, p. 157; Wilson & Luciano, 2002, pp. 170, 240). Each participant was encouraged to

be, first, the driver, and then, a passenger. When one participant was the driver and he drove in the direction he chose, the other participants pretended to be his thoughts, said aloud his fears to lose, other problematic thoughts, trying to get his attention. The passengers sometimes pressed the driver to change the direction of the bus, while others praised the driver. The driver's job was to keep the bus in the direction of playing the game instead of complying or reasoning the passengers' arguments. Then, the role was reversed and other participant took the role of the driver.

Finally, the experimenter recommended participants to practice the same when they were in real competitions, which was going to take place the following week.

## Values-acceptance-defusion Protocol Applied to Adolescents with Impulsive and Antisocial Behaviors

The present protocol was implemented as part of a preliminary study conducted with five adolescents (three boys and two girls, 15 to 17 years old) presenting conduct disorder and impulsivity (Gómez Rodríguez, Luciano, Páez, & Valdivia Salas, 2009). All five adolescents grew up in low income and dysfunctional families, and had legal problems (such as drug abuse and antisocial behavior) for which they were sentenced to do community service and received psychological treatment. By the time this study started, the teens had been in psychological treatment for three years, including contingencies management, behavioural contracts, family programs, and training of self-control and social abilities. The teens showed improvements in some areas, but the overall evaluation, after three years, was not positive. In addition, the adolescents had become resistant and uninterested to psychological intervention. This was the context for a radical shift in the type of intervention.

The main goal of the values-acceptance-defusion protocol was to have the adolescents take responsibility for their actions, for their life. In this direction, three aspects were clearly differentiated: first, the establishment of a new therapeutic relation to better deal with the high level of counter-control; second, the clarification of personal valued and chosen life avenues; lastly, the establishment of self-as-context as the locus that contains thoughts and feelings (Barnes-Holmes, *et al.*, 2001; and Luciano, Valdivia Salas, *et al*., 2009), for the promotion of abilities to cope with urges, rage, humiliation, and other unwanted feelings and emotions.

The specific components of the protocol were: (a) establishment of an appropriate context for the interaction between the therapist and the adolescent; (b) creative hopelessness, to confront the adolescents with the effects of a behavioural regulation based on experiential avoidance; (c) clarification of personal valued avenues, and (d) multiple experiential exercises to help adolescents defuse from private aversive events. The protocol was implemented in 4 individual sessions, lasting each 1.5 hours approximately, over a 2-week period. It was implemented by the same psychologist who had delivered treatment before.

Pre-treatment observations (collected from the teacher's daily records) included a high frequency of antisocial behaviors such as in-class smoking, being late or missing classes, robberies, questioning the teachers' rules, insulting, threatening their class-mates, etc; and a low frequency of desirable behaviors such as doing homework, participating in group activities, complying with teacher's demands, etc. In addition, according to pre-treatment self-reports, the adolescents felt like insulting and being aggressive when they could not do what they wanted, when they were under pressure, when they became nervous, or angry, when they felt bad when others laughed at them or underestimated their capacities, etc.

Results show a significant positive clinical impact of the ACT protocol in their in-class behaviours and in other relevant areas, such as family and social interactions, academic achievement, and occupational status. Relevant changes were also reported at one-year follow up (see details in Gómez Rodríguez, *et al.*, 2009).

We present now a detailed description of the protocol:

1) *Generating a new context for the interaction between the therapist and the adolescent*. The therapist proceeded as it follows:

> "I know that during the last years you have been forced to be here. And I know that if I were you, I wouldn't like to be here either. I have the feeling that during this time, all what I and my colleagues have done is to tell you what you have to do, but I have not asked you what YOU really want to do, and I have not asked you for permission to do what I do. I really feel now that I have not trusted you and that I have been treating you as a little kid incapable of taking responsibility of your own decision, even of making decision by yourself. Those days are gone. From now on, being here will be your own choice, and I will stop telling you what is best for you. Are you with me?"

The therapist then assured the adolescent the confidentiality of the sessions, and offered the possibility of attending voluntarily. As part of the new approach to work, any proposal by the therapist would have to be chosen by the adolescents freely. This way, the therapist asked for permission to audio-tape the sessions (arguing that the reason was to improve the therapist's work, which so far had not been very successful).

2) *Analyzing the pros and cons of what they do in class*. Once the adolescent had given permission to talk about what they did in class, the therapist brought one example, say, insulting and threatening their class-mates. The therapist asked why he did it ("I cannot stand other guys looking at my girlfriend, I get all nervous, and I need them to know who I am!"); what was the result in the short run ("I feel in power"), and in the long run ("I might not get my degree because of the negative reports by the school principal, but I don't really care"). The therapist proceeded: "However, you have said in the report that having the degree is something you want to finally be out of the school, isn't it? Are you willing to help me ascertain what's going on here?"

3) *Establishment of the creative hopelessness experience*. Next day, the therapist kept asking about the reasons for doing what he did in class (i.e., rage, humiliation), as well as the short and mid/long-term consequences, so that at the end, the student was clear that reacting aggressively to feel good and in power was not paying off, for instance, he said "I have failed the tests and was about to be expelled from the school." Then, the therapist asked why staying at school was really important for him, do not minding others. The teen mentioned a number of goals that would not be accomplished without getting a degree. When the participant was asked why this was important, he said he wanted to get a good job. The therapist asked again, why this was important, and the teen replied that he wanted to have money. Once more, the therapist asked why having money was important, and (unexpectedly for the therapist) he responded "I want to marry, have children in the near future." The therapist then proceeded: "So, is reacting aggressively, insulting your teacher, breaking chairs, fighting everyone when you feel like it, when you feel nervous, when you feel that nothing matters, working towards getting your degree, getting a job, being married and having children? Will it work in that direction?" When the teen responded "no," the therapist inquired, "and what now? "And he said he was getting nervous. This sequence served as an establishing operation for clarifying valued avenues.

4) *Clarifying personal valued avenues*. The goal at this point was to establish valued directions as the context for the participants to be able to choose goals coherent with such directions, and the specific daily actions to pursue such goals. In doing so, the psychological barriers would emerge and the short and long term consequences of their choices would be discussed. In this process, the therapist made constantly explicit the participants' freedom to choose their goals, enhancing their personal autonomy and also, their individual responsibility for the actions taken. For example, she said:

"We all have limits in the things we can choose. You have gone beyond those limits, established by law, and that's why you are here. It is true, though, that I have not let you choose within the allowable limits, as we discussed the first day. It hasn't worked, I made a mistake. As I told you, from now on I will treat you as an adult who can choose even in this situation, being forced by law to be here, because you can choose how to react to obligations and to the feelings they may bring along. I am sorry to have wasted your and my time and my proposal is not to be back to this. Are you with me here?"

This way, the new context that had been established the first day, was now clearly enhanced by the commitment between the therapist and the participant to go in a different direction. Next, the therapist continued the values clarification by introducing several metaphors (e.g., the magic wand, the crystal ball, the boat in open sea and the ports), all tailored specifically for this protocol. For instance:

"Imagine we had a crystal ball where you could see yourself 10 years from now. Also, imagine we had a magic wand you could use to magically turn yourself into the type of worker you really wish to be. Look at the crystal ball and tell me, what do you see yourself doing? Also, imagine you could use the magic wand to turn you into the person you wish to be. What would you like to see yourself doing ten year from now?"

When the valued directions were established, and the goals and specific actions were identified in such directions, the "boat in the open sea" metaphor was introduced. The therapist drew a boat and asked participants to think of the boat as being lost in the open sea, without any port to arrive to. She then made the ports equivalent to the areas the teen had previously mentioned as important in their life (e.g., family port, work port, intimate relationship port, friendship port, etc.). Let's take the example of an adolescent who identified getting a good job as a long-term goal, and graduating from middle school as a short-term goal in the work port. The specific actions identified toward these goals were going to class everyday, not insulting the teachers but complying with their rules, doing some reading, etc. The therapist proceeded by asking him what he wanted to do and, in contrast, what he used to do, why and what he got in the short and long terms (as part, again, of the creative hopelessness experience). For instance:

Therapist (T): "What does it have to happen for you to go ahead and going back to class right after this session, and not insulting?"
Adolescent (A): "I need others not to look at my girlfriend, not to insult me; I need the teacher to pay attention to me; I need to understand the books I read; I don't want to get bored"
T: "Tell me, what do you feel when someone insults you or looks at your girlfriend?"
A: "I feel angry, I feel tension in my stomach that I cannot stand, I have to go for him"
T: "And then?"
A: "I feel good, that's what he deserves!"
T: "And then?"
A: "It depends, sometimes the teachers expels me from class"
T: "And how do you feel about that?"
A: "I don't really care, it's always the same"
T: "Now tell me, is insulting or attacking your classmate like going to port or is it like being lost in the middle of the sea? Does it take you closer or farther away from graduating?"
A: "It is more like being lost, it's always like that"
T: "O.K., when you feel lost, who do you think is being in charge of your life, you or your anger, you or your tension?"
A: "Do not know, perhaps my being angry"
T: "And do you want your feeling of anger be in charge or do you want you to be in charge?"
A: "I want ME to be in charge"
T: "And who is ME?"
A: "ME, Luis"

T: "And where do you, Luis, really want to be? Do you want to be lost, or do you want to go to port? Remember, this is your choice, not mine. If being lost is what you want, that's fine, you don't need any help for that"
A: "No! I want to go to port!"
T: "What do you need to go to port?"
A: "I told you, if I get what I want, and nobody looks at my girlfriend is perfect, I will not be angry or mad at myself…"

Many reasons were given by all these teens to keep doing the same, and this was the context for introducing exercises to undermine reason-given (see, exercises in Hayes *et al.*, 1999; Wilson & Luciano, 2002, p. 227). Participants were asked about all their reasons to react aggressively and about all their reasons to stay in class. They were then asked about the reasons that other people would have to both insulting and staying in class (e.g., the president of Spain, the Godfather, his favorite basketball player, his mother, his girlfriend). They were also asked about different ways of reacting when being angry or mad at themselves. At the end, there were thousands of reasons and this was the context for the therapist to ask:

T: "And now, tell me what are you going to choose?"
A: "Well, I would like not to be angry, but…"
T: "What do you really think is going to happen when someone looks at your girl?"
A: "I will be angry…"
T: "So, what?
A: back lost in the sea, no port."
T: "And what do YOU choose, going to port or being lost, fused with your tension? It's completely up to you, but no matter what you choose, you will have to be responsible for it."

The context was now established for acceptance and, consequently, for the need to defuse from thoughts and other private events.

5) *Defusion through multiples exercises*. As in previous protocols, different experiential interactions were combined within the same exercises based on Luciano (2005). This combination of exercises aims to promote the differentiation and hierarchical relation between the person and his thoughts and feelings (for details, see Luciano, Valdivia Salas, *et al.*, 2009). In these exercises, physicalization exercises took a relevant role (see defusion exercises in Hayes, *et al.*, 1999, Hayes & Stroshal, 2004; Wilson & Luciano, 2002).

*Physicalyzing the dimensions of the self.*

The experiment put a black big piece of paper in between her and the participant (to illustrate this process and not being reiterative in the description, in this paper we will identified the thoughts as X, Z, Y, T, and so on. However, these letters were never used with the adolescents), and said:

T: “What are you thinking now?”
Adolescent (say Luis): “Nothing” (We identified this thought as X)
T: “Who is thinking nothing?”
A: “Me.”

When the participant responded, ME, the therapist drew a big circle in the piece of paper and said:

T: “Now, what are you thinking?”
A: “I think do not know what we are doing (we identified this thought as Y).”

The therapist placed a small piece of paper inside the circle and said:

T: “This is your thought Y. Who is thinking Y? Who is having Y?”
A: “Me.”

The therapist re-drew the circle she had painted before, and said:

T: “Right now, what is the thought you are having?”
A: “Z” (a new thought he was having).

The therapist gave a small piece of paper to Luis, saying

T: “This is your thought Z, please, put in the circle.”

The next time that the therapist asked this question and when Luis responded “Me,” the therapist used such experiential ME to establish a hierarchical relation between Luis and his thoughts by saying:

T: “This is Luis (pointing to the circle) and these are your thoughts (pointing to the several small pieces of paper that Luis had put in the circle). So, Luis is here and there are your thoughts X, Y, Z. It seems that you are much more than just a piece of this. What do you contain?”
A: “I see, all these are my thoughts and I am like a box having all with me.”

Then, a similar process followed with sensations and with memories as multiple-exemplar training.
For example, when working with a sensation, the therapist asked the participant to imagine he could grasp it and look at it:

“what does it look like, put it in front of you and tell me what’s its color (let the teen to answer), its temperature..., its strength...? Now I want you to put that sensation in a piece of paper, and place it in the circle… and now, tell me, are you thinking now?…, what are you thinking?... (Let’s say, he said, thought T?) Who is thinking T? (and when the adolescent responded, she pointed to the circle).”

Then, the therapist proceeded:

> "So, this is you (pointing to the circle) and here are your thoughts (pointing to the small papers inside the circle), this is you and here are your emotions (pointing to other small papers). Now let me ask you, do you want to be in charge of your life, or do you want your emotions to be in charge?"
> A: "I want Me to be in charge! (pointing to the circle), what do you think? I want to be in control, I want to be the commander."
> T: "Let's do more exercises to see how you can get unstuck from the bad memories you have, the rage and frustration you feel. Are you willing to do that?"

*The written thoughts into the pocket* (based on Gutiérrez, *et al.*, 2004).

The participant was given a piece of blank paper and he was asked to write, using a single word, any thought that showed up in a particular moment, then, he was said, to crumple the paper, and to put into his trouser pocket. After a few number of these examples, he was asked not to write anything, but only to imagine him writing the thought in the paper and putting it in the pocket. Then, one more exercise followed.

*The eye-to-eye contact exercise* (Hayes, *et al.*, 1999, p. 244; Wilson & Luciano, 2002, see p. 199).

The therapist introduced a variation of this exercise by asking the participant to imagine that doing eye-to-eye contact was in the direction to get to an important port. Then, she asked the adolescent not to talk, but just notice his thoughts as they showed up, or any sensation such as the urges to talk or to stop looking at the therapist. She also instructed the adolescent to ask himself who was having the thoughts while keeping on task, that is, while looking at her, as if it was the most important thing to do right in that moment.

*The autumn and the leaves exercise* (Pankey & Hayes, 2004, p. 320; Wilson & Luciano, 2002, p. 216). A variation of this exercise was introduced.

The therapist asked for permission to do one more exercise. Participant was asked to imagine he was sitting close to a tree and looking at the leaves falling in the river and being lost in the flow. The therapist then asked him what thoughts was he having (as in previous exercises), to write them in a piece of paper, to put them on a leaf, and to let them go with the flow. Same as before, if emotions occurred (i.e., clinical behaviors), the therapist asked the adolescent to describe their shape, to grasp them and look at their other features (color, weight, etc.), to put them on a leaf and let them go. These interactions were always intertwined with questions like "who is having the emotion." To finish this exercise, the therapist asked for permission to go through past or future situations to work with the thoughts and emotions they brought along, as part of going in the direction of an important port.

The final part of the protocol focused in giving the adolescent one more chance to commit to what they valued, through explicit choices.

> T: "if you choose to act towards the ports that you mentioned as important for you, what will you do when the rage, or the urges to hit somebody show up, or when the thoughts "the others have to change, not me," or "it's not my fault" show up?"
> A: "I will write them on imaginary papers and will put them in my pocket, or let them go with the flow or with the wind."
> T: "And what can you do if you, in fact, insult or hit others?"
> A: "Well, do not know, I'm not going to like, but perhaps will rectify by apologizing or something like that."
> T: "Does it place you closer to your ports, or does it let you lost in the open sea?"

## Conclusion

The implementation of the ACT protocols, in group or individual formats, made a clear difference in the adolescents' behaviors. In the first study, the adolescents who practiced sex without penetration reported significantly fewer sexual partners and less use of drugs before or during sex, than adolescents who only received information. In the second study, the ACT brief protocol improved the chess performance of most of the bright young chess players compared to those in the control condition. Lastly, for the five teens presenting antisocial behaviors, the ACT protocol showed a positive clinical impact in their in-class behaviors and in other relevant areas. All three protocols focused on placing the adolescents in a better position to choose and take responsibility for their actions. This was accomplished by promoting the acceptance of urges, unwanted thoughts and sensations in the context of what they discovered they valued.

The three brief protocols (Gómez Rodríguez, *et al.*, 2009 Gutiérrez Martínez, Bermúdez, *et al.*, 2007, Ruiz & Luciano, in press) contained the main relevant components of the ACT process, although in different degree according to the problem addressed: (a) the necessary functional analysis which becomes the context to generate the experience of creative hopelessness, as well as, the appropriate context for therapy; (b) values clarification, which needed more exercises in some cases than in others, but that is always the context for accepting discomfort and other problematic thoughts and emotions; and (c) many defusion interactions as multiple-exemplar training for the adolescents to be in a better position to experience and defuse from inevitable private events in verbally competent humans. Regarding the defusion practice, all three protocols involved, although in different degree, mixed interactions to promote "experientially" the core differentiation between the person who is having the thoughts and feelings, from the thoughts and feelings themselves. Of course, this is a whole socially constructed process (see for details of this social product, Barnes-Holmes, *et al.*, 2001; Hayes, 1984; Kohlenberg & Tsai, 1991; Luciano, Valdivia Salas, *et al.*, 2009; Skinner, 1945).

To sum up, the main goal of this paper was to present a series of ACT applications to promote the abstraction of the relevant components and the flexibility in applying the acceptance-based-methods. Along the three studies, we have described an example of

establishing a useful therapeutic relationship, as well as several interactions to undergo experiential creative hopelessness, to clarify values (for example, with metaphors and exercises by taking advantage of the adolescents' perspective repertoires to see themselves across time). Lastly, we have described several mixed ways to undergo the necessary experiential component to be defused from thoughts, memories, and feelings.

As previously mentioned, these protocols were part of preliminary studies developed to better understand the conditions under which the different ACT components work, as well as to test for the effects of implementing mix interactions into the same exercises. In spite of the fact that these brief protocols are only preliminary in approaching these goals, their impact as a whole was evident. Beyond such a benefit, the protocols presented in this paper have also cleared the way for the design of basic studies in our lab concerning the variables responsible for the transformation of function involved in the different ACT methods. Needless to say that we believe this scientific process will, sooner or later, contribute to a better understanding and application of acceptance-based methods.

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