



## Experiences of the step-out technique in emotion-focused therapy for clients with autistic process

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### ABSTRACT

Lower levels of experiential processing are associated with poorer therapeutic outcomes. Clients with autistic process are reported to experience sensory-body awareness processing problems which is recognized as an interoception marker. The Step-Out is a simple bodily technique, used within the Alba Method, to achieve an emotionally neutral, relaxed, and alert state. The aim of this study was to explore the experiences of clients with autistic process with the Step-Out. Eleven clients learned and spoke about the technique. A thematic analysis of clients' responses produced an overall theme 'In sensing me to connecting to you'. This contained three broad themes: *In-and-out of interoceptive contact*, *letting go of tension* and *beyond self-experience*. Clients were able to verbally describe their internal sensations and perceptions following the task. Responses ranged across an experiential continuum from emotional overwhelm, to no felt change to experiences of relational connection. Preliminary findings provide promising support for the utility of the Step-Out as a mini experiential task to help clients with autistic process shift their attention from an externalized to an internalized process, and to recognize, express, and regulate their internal states. Findings are tentative due to the exploratory nature, limited participants, and lack of assessment measures.

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Autism is a lifelong complex neurodevelopmental condition characterized by qualitative differences in social communication and interaction, paired with restricted, repetitive patterns of behavior, interests or activities (World Health Organization, 2018). Autism is associated with various sensory atypicalities across multiple domains (Nicholson et al., 2018; Shah et al., 2016). Studies estimate 45–96% of autistic people report experiencing difficulties with regulating sensation and perception (Schaaf & Lane, 2015). The interoceptive sense includes the sensations of pain, temperature, hunger, satiety (Craig, 2015). Autistic people have challenges with accurately sensing the body's physiological state (Elwin et al., 2012), displaying unusual thermoregulatory sensitivity (Cascio et al., 2008). Autistic autobiographies report persistent interoceptive atypicalities, especially hyposensitivities to internal cues such as a difficulty in detecting and recognizing bodily sensations (Elwin et al., 2012).

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Interoception is the ability to detect and attend to internal bodily sensations. A three-part neuropsychological model devised by Garfinkel et al. (2015) separates interoceptive processes into three measurable constructs, which can be distinguished from exteroception (external sensation) and proprioception (body position in space). The first process, interoceptive accuracy, includes measurable, discriminant processes such as heart rate, or stomach distension. The second process, interoceptive sensibility, is the subjective experience of internal processes and to date has been measured by self-report questionnaires. The third process is termed interoception awareness and is a metacognitive measure of interoceptive accuracy, or to what extent one is aware of their ability to accurately perceive internal processes (Garfinkel et al., 2015). Autistic adults experience difficulties in emotional functioning, including emotion recognition and emotion regulation (ER), and that these difficulties are responsible for high levels of diagnosed comorbidity (Mazefsky et al., 2014), trauma-related experiences (Robinson, 2018) and suicidality (Conner et al., 2020). Up to 60% of autistic adults have at least one co-occurring psychiatric condition such as anxiety disorders (Maddox & White, 2015) and figures of depressive symptoms as high as 47% have been reported (Wigham et al., 2017).

### **Emotion-focused therapy for autism spectrum**

Emotion-Focused Therapy (EFT) (Elliott et al., 2004; Greenberg et al., 1993) is an evidence based humanistic-experiential psychotherapy (HEP). EFT has been used as a treatment for major depression (Goldman et al., 2006; Greenberg & Watson, 2006), for complex trauma (Paivio & Pascual-Leone, 2010), as a treatment for social anxiety (Elliott & Shahar, 2017) and generalized anxiety (Timulak & McElvaney, 2015). With preliminary positive findings in clients with autistic process for enhancing emotional processing in both cognitive and affective empathy (Robinson & Elliott, 2016; Robinson, 2019) and in the treatment of psychological distress to alleviate trauma (Robinson, 2018).

Emotion-Focused Therapy is process marker driven and involves dynamic case formulations with the client during therapy. In EFT Goldman and Greenberg (2015) propose three stages to case formulation with therapists forming a working hypothesis about the mechanisms underlying the client's problems. EFT case formulation provides an organizing framework to aid therapists in mapping out what to do next from moment to moment (Goldman, 2017). Further, client information is organized along a number of dimensions including (a) style of emotional processing, (b) narrative themes related to attachment and identity issues, (c) painful emotion compass, (d) problematic or maladaptive emotion schemes and (e) moment by moment markers and accompanying tasks that might be undertaken.

Robinson and Elliott (2017) developed the first case formulation for clients with autistic process for working with misempathy and for working with trauma-related experiences Robinson (2018). It is based on the premise that this population experience qualitative differences in emotional processing, both of their own emotions and of the emotions of others. Further, that painful experiences occur through misempathy within interpersonal encounters as a result of neurotypical-neurodivergent intersubjectivity (Robinson, 2018). This affective misattunement manifest a fragile sense of self and lack of self-agency within interpersonal engagement that predisposes autistic people to trauma related experiences. It is this affective neurotypical-neurodivergent misempathy that underpins

interpersonal ruptures, rejection by neurotypical others, social exclusion and ultimately a deep sense of aloneness. This manifests in both internalized (fragmentation and depression) and externalized (a need for a sense of control and anxiety) reactive responses. As such, autistic people often report experiences of never feeling connected with others leading them to seek psychological support in adult life.

In EFT case formulation for clients with autistic process (see Robinson, 2018) describes the process of transformation of problematic emotion schemes across three stages where the therapeutic focus is on accessing (stage 1), expressing (stage 1 & 2) and strengthening (stage 3) cognitive-affective empathy for self-and-other. Stage one involves an emotion assessment phase where the therapist assesses such factors as capacity for an internal focus and degree of emotion regulation. At the beginning of therapy clients may demonstrate limited emotion discourse or discourse that reflects disconnection or dysregulation and emotion responses in-session may be flat or extreme:

Therapist: 'and how does that feel for you just now?'

Martin: I don't know. I don't know how I feel. I don't feel anything".

Frequently, clients express being out of touch with their inner emotions, stating 'I don't feel my emotions'. This signals an interoception difficulty, of being out of connection with one's body or a disembodied self. This is an important phase as it aids therapist understanding of clients qualitative differences in emotional processing, their capacity for interoception, ability to label and express emotions and to narrate their life story.

In stage two the therapist is assessing the emotion scheme and deriving a formulation narrative with the client. Therefore, the main tasks of therapy are to observe emotional processing style and identify qualitative differences, to observe neurotypical-neurodivergent intersubjectivity and identify these as triggers for painful experiences and to help clients with emotion transformation by accessing and processing their own emotions and the emotions of others. Initially, this often results in the client engaging in negative self-treatment dialogue:

Martin: They talk about conversations that I don't know about and you feel guilty about not knowing about them . . . . I can't have conversations.

During stage two the therapist aids clients in differentiation of core painful feelings stemming from neurotypical-neurodivergent intersubjectivity, such as aloneness, shame, and fear. The therapist is listening for an emotion compass recalled in the client's story, that is often expressed as feelings of helplessness or despair:

Martin: I felt that there was something not right about me. Something wrong. I just didn't think there was anything to do and that there was no point in trying anymore, so I became more isolated and stuck in my flat on my own.

In stages two and three the therapist uses deepening methods such as video Interpersonal Process Recall, as a process guide to evocative unfolding of recalled trauma, which can lead to tapping into feelings associated with the memory and to accessing the adaptive emotion that counters feelings of hopelessness, helplessness, and fear. The client can connect with anger at the violation by others:

Martin: I could viciously attack them all . . . . I didn't. I feel like doing that now.

Therapist: There is strength in your voice. It sounds, a strong anger.

Martin: I am angry with all those people who called me the name is if that was ok, as I accepted it. I didn't.

In stage three emotional transformation involves strengthening cognitive-affective empathy for self-and-other. This is achieved through engagement in enactment tasks, to help access the adaptive emotion and express it. The therapist helps the client to identify what is the core pain and to provide empathy as the client experiences this. The therapist asks the client, 'what does this part of you need?' When they are able to express this they engage in an imagined chair enactment of speaking one's truth:

Therapist: If you could speak to your Dad, if he was here sitting in that chair, what would you like to say to him?

Martin: I'd just ask him why didn't you stand up for me? ...

Therapist: [Lowers tone of voice and points to empty chair.] Tell him.

Self-compassion and self-soothing can be difficult to achieve, opportunities offered by group members to soothe comes from neurodivergent-neurodivergent intersubjectivity:

Carla: I feel as if I want to give Martin a hug . . . . It's a protective feeling, it's a protective feeling that I've got. [Pause.] ...

Carla: I want to give Martin a hug. [Carla looks toward Martin, who holds her gaze; they hold each other's warm gaze.]

These deepening methods are used to attend to process markers during stage 3 that facilitate emerging narratives with the construction of new meaning. The final stage of task resolution is meaning creation, which is best achieved within interpersonal understanding and involves grieving and letting go:

Therapist: And how do you feel about your Dad just now?

Martin: It's still sad that he got it wrong . . . . I wasn't diagnosed then and that's why he didn't understand me.

Therapists are looking for affective task markers that signal a client's readiness for therapeutic work which indicate a case formulation for a specific task. Therapists form a working hypothesis about the mechanisms underlying the client's problems (Goldman & Greenberg, 2015). For clients with autistic process an *interoception difficulty marker* represents one such task: this is an affective issue expressed through a sense of being disembodied with self or being out of touch with internal bodily sensations and feelings. Often, neurodivergent-neurotypical encounters results in clients arriving for group therapy in a state of high agitation, displaying behaviors of distress, dominating interactions with mono-dialogs and yet report being out of touch with their sensory-body awareness. This results as an interoception difficulty task marker as clients experience emotion dysregulation, of not being connected to one's body and internal sensory signals which indicates a need for an experiencing task.

To date, there has been no enquiry into emotion-focused case formulation (Goldman & Greenberg, 2015; Goldman, 2017) exploring components of a working hypothesis about

the mechanisms underlying interoception difficulties for clients with autistic process. In the present study, we explored adding the *Step-Out* as an experiencing task to aid in psychological transitioning from an externalizing process to an internalizing sensory-body process. The *Step-Out* is part of a broader method for working with emotions called *Alba Emoting*, *Alba Method*, or simply *Alba*. Below we describe the basis and application of the *Alba Method*, with emphasis on the *Step-Out*.

## The Alba method and the step-out technique

The method is based on research by Susana Bloch and her colleagues (Bloch et al., 1987, 1991; Santibáñez-H & Bloch, 1986), who found specific patterns of breathing, facial expression, and posture that distinguish joy, sadness, fear, anger, eroticism, and tenderness. They also found that intentionally performing the emotion-specific somatic patterns induced genuine emotions in the person doing them (Bloch et al., 1987, 1994; Santibáñez-H & Bloch, 1986). Subsequent studies by researchers unaffiliated with the *Alba Method* have by and large confirmed these findings (Kalawski, 2020). Specifically, anger, fear, sadness, joy/laughter, eroticism, and tenderness can be distinguished by respiratory patterns (Filippelli et al., 2001; Kreibig et al., 2007) and combinations of postural and facial expressions (Cordaro et al., 2020). Research also shows that the reproduction of respiratory patterns, body movements, and facial expressions can induce anger, fear, joy, and sadness (Coles et al., 2022).

The following quote explains how the *Step-Out* technique was developed:

We had observed right from the beginning of our research that people who reproduced the emotional patterns had a tendency to 'stay', so to speak, within the induced emotion. For instance, when our first experimental subjects returned to the laboratory, they often reported having had dreams or moods which were connected to the exercises performed in the previous session. In order to avoid what I call 'emotional hangovers', we developed a 'Step-Out' technique which consists essentially in ending each emotional reproduction by at least three slow, regular, and deep, full breathing cycles followed by a total relaxation of the facial muscles and a change in posture. Such a procedure brings the person back to a 'neutral' state. (Bloch, 1993, p. 128)

Based on their findings, Bloch and her colleagues (Bloch et al., 1987) developed a program to train actors using the specific emotional patterns and the *Step-Out* technique. Bloch (1993) later called this method *Alba Emoting*. Currently, the *Alba Method Association* uses the simpler name *Alba Method*.

Over the years, Bloch and her students began teaching *Alba* not only as an actor training approach but also as a general method for working with emotions. Originally, this was not based on any theoretical understanding of how or why this work could be useful, but rather on a general idea of 'getting in touch with' emotions through the body. The training was promoted as a form of personal development rather than as a therapeutic method. Kalawski (1997) explored integrating the method into experiential psychotherapy by guiding clients through the emotional patterns and the step out. He found that clients had a slightly deeper level of experiencing immediately following these exercises. Following EFT theory, Kalawski (2013) proposed that therapists could use *Alba* to facilitate emotion awareness, regulation, and transformation. Most recently, Schilling (2021) found that *Alba* training improved emotion recognition ability.

The present study focused only on one element of the Alba Method: the Step-Out technique. The Step-Out is in a way similar to deep breathing techniques often taught to clients. The main difference is probably that sometimes deep breathing is used as a part of a deep relaxation routine. The objective of the Step-Out technique, by contrast, is to achieve a relaxed yet alert state. In the Step-Out technique, the person is standing up and with their eyes open. The idea is to remain aware of one's environment, as opposed to drifting off into a trance.

Finally, the Step-Out technique also has similarities and differences with meditation and mindfulness techniques. There are many varieties of such techniques, but some of them probably lead to a state of relaxed alertness, just like the Step-Out technique does. In this case, the main difference is in the means for achieving such state. Techniques such as sitting still and observing one's breathing rely on the person's ability to understand the task and perform it independently. This is hard for some people. Furthermore, some people feel aversion to sitting still. And this may not be possible at all when the person is already in an emotionally aroused state. The Step-Out technique is physically concrete, and the therapist can visibly demonstrate it and coach the client through it step-by-step. These are important advantages in some contexts. There are times when deep breathing or meditation techniques will be just what is called for. We believe that the Step-Out technique, because of its unique characteristics, fills a void in terms of the available tools for emotion regulation.

The Step-Out technique was introduced to clients with autistic process as an experiencing task which served as a transition into the therapy (see [Table 1](#) Process-Experiential Task: Marker, Intervention, End State). The rationale was two-fold. First, we wanted to see if it could have an emotion regulation function by helping clients develop access to internal bodily sensations and feelings and symbolize their inner, emotionally tinged experiences. Thus, this experiencing task serves to move clients into a receptive frame of experience for using the therapy. Therefore, we wanted to explore whether it could help clients with autistic process to achieve a level of emotional arousal which is useful for therapy. The Step-Out regulates emotional arousal without repressing emotions, and it does this through the body. Thus, we reasoned that this exercise might open clients to interoception and enhance their embodied self to help them be more emotionally available in the session. Second, we wanted to see if it served a relational function by supporting neurodivergent-neurodivergent intersubjectivity to help clients make contact with each other and by doing so helping to create a therapeutic space for emotional processes and healing to take place.

In this small scale qualitative study, we wanted to explore how useful the Step-Out technique was for our *interoception marker* working hypothesis for clients with autistic process. Specifically, how useful the Step-Out could be as a mini experiencing task that

**Table 1.** Process-experiential task: marker, intervention, end state.

| Task marker   | Intervention | End state  |
|---|--------------|--|
| Experiencing tasks  |              |  |
| <i>Interoception Marker:</i> Interoceptive functioning difficulties (e.g. out of touch with internal bodily sensations and feelings; disembodied with self) | Step-out     | Expressions of sensory signals and feelings located in awareness (externalized to internalized sensory shift; bodily awareness; embodied self) |

supports difficulties of being out of touch with internal sensations and disembodiment reported by clients with autistic process to shift their attention from an externalized process to an internally focused process with enhanced sensory-body integration. To the best of our knowledge no qualitative research to date has been carried out using the Step-Out technique to ascertain experiences of clients with autistic process (or with any other population). This study set out to fill this gap. We introduced the Step-Out task to clients with autistic process and asked them to report their experiences immediately after completing the task.

## Method

### *Participants*

Participants were 11 young adults (six male and five female) with autistic process (a confirmed diagnosis of autism spectrum (Diagnostic and Statistical Manual [DSM-5; American Psychiatric Association [APA], 2013] or Asperger Syndrome (International Classification of Diseases [ICD-10; World Health Organization, 2004]), between 16 and 29 years of age. Six of the participants had co-occurring conditions including Social Anxiety Disorder, Bipolar Disorder and Dyspraxia. The participants were in 3 small Emotion-Focused Therapy for Autism Spectrum (see Robinson & Elliott, 2017) groups ( $n = 3$ ,  $n = 4$ ,  $n = 4$ ). Eight achieved competency in performing the Step-Out, whilst three achieved an emerging level of competence. These three participants had a co-occurring diagnosis of Dyspraxia. This small scale study is part of a large process-outcome protocol for Emotion-Focused Therapy for autism spectrum, which was granted full ethical approval by the University Ethics Committee.

### *Procedure*

The therapist (the first author) guided the participants in small groups (three groups of three to four participants) through the Step-Out task (see Step 1–4).

**Step 1: Finding Space:** At the beginning of each weekly Emotion-Focused Therapy group session participants were asked to find a space in the room so they could stand alone, with space between themselves and other clients and therapists. Then each participant was asked to stretch out to see that they had enough room to move without touching anyone standing close to them.

**Step 2: Introducing the Guided Step-Out Exercise:** Next, the therapist explained to the group that they were going to begin the session by talking them through a guided Step-Out exercise.

**Step 3: Guided Step-Out Procedure:** A guided Step-Out task was conducted by following the same procedure: The therapist asked participants to listen to the instructions and or to observe the therapist demonstrating the actions (or both) which ever they found most helpful. Below are the standard Step-Out instructions:

Stand in an upright position with feet parallel, aligned with the hip bones, facial muscles relaxed and eyes open looking straight ahead at the level of the horizon. In this posture, you breathe in through the nose and out through the mouth with a quiet, easy and relaxed rhythm, without forcing the breath, trying to keep inhalations and exhalations equal in time.

The respiratory rhythm is then synchronized with a continuous movement of the arms: while inhaling, the extended arms are lifted in front of the body, with hands interlocked loosely, tracing a sort of 'generous arc' over the head, bending the elbows as the hands reach behind the neck. During this action, inhalation is synchronized with the speed of the lifting arms. Then, after a brief pause, the air is gently expelled through slightly open lips (as if blowing out an imaginary candle), while the arms descend in synchrony with the exhalation, until they return to the initial position. At this moment all the air must have been expelled. This cycle is repeated at least three times, very consciously. Then the face is gently touched, both hands giving small massage-like movements, from the center of the face outwards. Finally, the exercise is concluded by shaking the whole body and then changing posture. (Bloch, 2017, pp. 124–125)

Step 4: Reflecting upon Experience: Following the exercise clients are given time to reflect upon their experience and to share this with the group.

- (i) The therapist asked the group (avoiding asking individual clients directly at first) "How are you feeling just now after doing that?" Each client was given an opportunity to respond to the initial prompt.
- (ii) This was followed by a second more directed prompt "What does it feel like inside your body?"
- (iii) This was followed by directly responding to each client by reflecting their voiced experience back to them for example "For you [name] you say it felt like [label]" or "You didn't feel anything [name]?" and finally if a client had not responded "What did it feel like for you [name]? With a final prompt "Did you feel anything at all [name]?"

Participants carried out the Step-Out task between 3 to 18 times in total to varying degrees of proficiency (see 1 for proficiency checklist) from emerging ( $n = 3$ ) where the person attempted the technique, but failed to master it fully or inconsistently, to competent, where they were able to independently master the technique ( $n = 8$ ).

### **Analysis**

All therapy sessions were video recorded. Data from each group was extracted in chronological order. Video material from Step 1 – Step 4 was extracted for analysis. The first author and two independent raters, who were Masters in Autism graduates and experienced autism practitioners, observed the level of skill competency for each client. Raters were trained over a 12-week period to rate video footage using the Client-Emotional Processing Scale for Autism Spectrum (Robinson & Elliott, 2016). The instrument used to measure competency for the Step-Out was an observation checklist (see [Appendix 1](#)). Transcriptions of each client's verbal responses as well as descriptions of physical responses were recorded. For initial analysis, the researcher familiarized themselves with the data through watching the video footage whilst actively rereading each client's verbal response and making observations. The video footage was watched by the researcher and two independent raters and the researcher observations were shared and discussed. A consensus agreement was formed on the most salient client responses. For initial coding, line-by-line coding was employed, using semantic codes to stay close to the content of the data (Braun & Clarke, 2012). First, the first author read through each group



cohort systematically to gain an overall sense of how participants were responding within each group. Following this, the researcher read through the data line by line to familiarize themselves more closely with the data. Second, the researcher highlighted key terms and descriptions and then removed highlighted text. The first highlighted text was compared to the second and clustered together if similar or separated if different. The third highlighted text was compared to the previous and clustered if similar or separated if different. This process was repeated until the text was sorted into similar clusters. Following this, the researcher coded the clusters. The first author then generated themes from the codes. Finally, both authors reviewed and refined these. In the final step, both authors defined and named the main themes with subthemes putting these in a logical order.

## Results

Data were organized into themes and subthemes, with the final thematic framework presented in Table 2. An overarching theme emerged: In sensing me to connecting to you. Three themes, comprising 7 subthemes, were identified. The three major identified themes are as follows:

- (1) In-and-out of interoceptive contact
- (2) Letting go of tension
- (3) Beyond self-experiencing

The themes and subthemes are expanded with participant illustrations. The analysis of the verbal responses of the eleven young adults are reported with verbatim comments below and are presented across a main overarching theme representing an interoception continuum *in-sensing me to connecting with you*. This main overarching theme subsumes three main themes, the first being *in-and-out of interoceptive contact*, which itself contained three subthemes. The first being a central point is reflected as *no felt change* with two of the young men stating that ‘it had no effect’, that they ‘felt nothing’ or that they ‘didn’t have a clue’ as ‘it’s hard to say how it feels internally’. This expands with the second subtheme as a heightened internally located *expanding body awareness* was reflected by three of the young adults, with two young men stating that they ‘feel it in my chest’ that ‘it helps control my heart rate’ and that they were ‘breathing better’. This was in contrast to the third

**Table 2.** Thematic analysis of step-out.

| Theme                                     | subtheme   | illustration  |
|---|--|---|
| <b>IN-SENSING ME TO CONNECTING TO YOU</b> |  |   |
| <i>IN-AND-OUT-OF INTEROCPTIVE CONTACT</i> | <i>No felt change</i>                                    | ‘Feels the same. Feeling neutral’ [gives non-verbal neutral gesture]  |
|   | <i>Expanding body awareness</i>                          | “feel it in my chest” that “it helps control my heart rate”<br>‘Oh my god! Not too great! My heart is beating fast, I’m not feeling great because I know my heart is beating fast.  |
|   | <i>Emotional overwhelm</i>                               | ‘it feels good as the pain in my back is less’  |
| <b>LETTING GO OF TENSION</b>              | <i>Pain reliever</i>                                     | ‘Feels good. When I exhaled it was like a cooling feeling. Like a fresh sensation’  |
|   | <i>Regulatory sensibility</i><br><i>Harmonious state</i> | “it’s a net improvement of more awake and more relaxed<br>“I know what you mean by neutral. I’m the same as you [points toward the other male group member]. It is a latent feeling most of the time and I don’t feel anything at all, which is good” |
| <b>BEYOND SELF-EXPERIENCE</b>             |  |   |

subtheme as an *emotional overwhelm* with one young woman who had extreme physical reactive signs of ‘facial flushing’ and ‘rubbing eyes’ stating, ‘Oh my god! I can’t believe that. I’m not feeling great, because my heart is beating fast and I can feel it beating fast’.

The second main theme, *letting go of tension*, contains three subthemes each moving toward positively expressed responses. The first being a *pain reliever* one young man responded on a number of different occasions to the Step-Out as relieving painful experiences, such as ‘that’s actually helped my back’ and ‘it feels good as the pain in my back is less’. Also, that they could locate the pain ‘my neck hurts’ with the ‘it’s the tension as soon as I go anywhere on public transport it locks up’ and that ‘it’s good as it helps relieve tension and pressure’. The second subtheme being *regulatory sensibility* with four of the young adults experiencing a cooling sensation from physical ‘not as warm, improved respiration’ and ‘not sweating as much, which is always good’ to one young woman stating that she felt ‘good’ that ‘when I exhaled it was like a cooling feeling. Like a fresh sensation’. The third subtheme being *harmonious state* with four adults reporting a sense of peacefulness with two young men stating that ‘it feels good, more peaceful’. This moves toward expressions of a calming relaxing feeling, with four of the young adults stating that they had a sense ‘I feel calmer, more relaxed’ whilst ‘it’s a net improvement of more awake and more relaxed’. With one young man stating that he felt benefits ‘Cathartic, a relief. Both the last session and the Step-Out and last week. Last week I was just really agitated and the train station barrier wouldn’t lift and this created stress. The Step-Out helps to feel a bit calmer. Helps you to control your heart rate’.

Whilst most responses were self-experience to interoception, two young men made comments which generated the third theme *beyond self-experiencing* as they specifically referred to relational connections with others. From feeling connected with others such as ‘I feel connected. I know it sounds bonkers, but I feel connected. I almost feel the energy in the room. Sort of, we are all individuals but we’re all on the same wavelength’ and ‘You see, I can feel tension and I don’t feel any tension, it’s all away’ to more of a shared experience, and another example, such as ‘I know what you mean by neutral. I’m the same as you [points toward another male group member]. It is a latent feeling most of the time and I don’t feel anything at all, which is good’.

Finally, besides categorizing clients’ comments according to themes, we would like to convey the temporal progression of clients’ responses over time. Table 3 presents the change process across therapy following the introduction of the Step-Out technique. It

**Table 3.** Client’s trajectory from fear response to relaxation.

| Step-out Task | Immediate Response  |
|---------------|---|
| Session 1     | Oh my god! [face flushed] I can’t believe that [holding her eyes and then rubbing her eyes]<br>(T) How are you feeling just now?<br>Not too great! My heart is beating fast, I’m not feeling great because I know my heart is beating fast. |
| Session 2     | Good. When I exhaled it was like a cooling feeling. Like a fresh sensation.   |
| Session 3     | I feel the same as I did last week. Cooling and refreshing. Feels about the same. Its good.   |
| Session 4     | The same as last week. Good. Feels fresh.   |
| Session 5     | Yeah. It feels good. Feels cooling and refreshing.  |
| Session 6     | It feels good. Cooler and refreshing.   |
| Session 7     | The same as last week. When I exhale it feel a fresh sensation. It feels good.  |
| Session 8     | Good. I feel calmer and it cools me down.   |
| Session 9     | The same as the last few weeks. Cooler when I exhale and calmer, more relaxed.  |

**Table 4.** Client illustration of interoceptive sensibility and interoceptive awareness.

| Step-out Task | Immediate Response   |
|---------------|--|
| Session 1     | I'm not as toasty (warm) as I was. Quite good. More realxed.   |
| Session 2     | I'm not as warm as I was, I'm not sweating as much, which is always good. Like you said improved respiration.  |
| Session 3     | That's actually helped my back a bit. Stretching usually does. My back hurts less which is good.   |
| Session 4     | [stroking beard] Or stroke your beard as it may be. It felt good. I've actually been able to synchronise my sweating a little bit. Breathing is really good for that. It's hard to do if you're in a rush.   |
| Session 5     | [You know I can't feel my hands through my beard] I feel a bit cooler, which helps. Which I see as a net improvement because it was pretty toasty when I got in. It feels kinda like aerobics, I was thinking that when my hands were going up and down. It seemed to help. You sweat a lot when you're warm, but if you can regulate your breathing you can control your rate of sweat. It did seem to have a good net effect for that. |
| Session 6     | [twisting neck from side to side] My necks cramped. I've been getting that quite a lot. Its always in the same spot. I've been thinking about going to casualty to see if they will x-ray it. I feel more relaxed. I think the breathing is really good for that. It controls your sweat and tension.  |
| Session 7     | Cathartic, a relief. Both the last session and the S-O and last week. Last week I was just really agitated and the train station barrier wouldn't lift and this created stress. The S-O helps to feel a bit calmer. Helps you to control your heart rate.  |
| Session 8     | Less sweaty  |
| Session 9     | Better. I'm breathing better. I think it is really good for that, to control pace. To control the pace of your breathing.  |

summarizes one client's trajectory from fear through the initial interoceptive overwhelm to heightened awareness of internal processing to a sense of relaxation.

Table 4 presents another client's experience of the Step-Out demonstrating an increased sense of awareness of thermoregulation over time. The client seems to describe their experience with increased differentiation of regulating sensation and perception.

## Discussion

The purpose of this study was to explore our interoception marker working hypothesis for clients with autistic process. We recognize the need for a mini experiencing task to scaffold sensory-body integration to enhance self-embodiment as a consequence of interoceptive difficulties. We hypothesized that the Step-Out technique would act as a process guide to interoception by helping clients shift their attention from an externalized to an internalized process, as well as enhancing their ability to access and report interoceptive body awareness. To the best of our knowledge this is the first time the Step-Out has been used as an interoception marker for clients with autistic process within an emotion-focused case formulation. We found that the Step-Out was a helpful process guide for clients with autistic process, helping to shift to a more internal experiential focus and transition aid into therapy. We propose that the EFT Step-Out technique can be added as a useful experiencing task within stage one of (Goldman & Greenberg, 2015) case formulation framework, specifically for clients with autistic process or those who report being out of interoceptive experiencing.

The Step-Out has been used for decades as part of the Alba Method. The core of the method is the somatic patterns for six emotions, identified in basic research. There is research on Alba training focused on these patterns (e.g. Bloch et al., 1994). However, we are not aware of any previous research on teaching the Step-Out specifically, either with individuals with autistic process or with any other population. Based on the experiences of

the second author teaching the Alba Method to a variety of persons, we think that the experiences reported by the participants in this study are similar to those reported by people without autistic process as well. Future studies might explore the responses to the Step-Out with other populations.

We found using the Step-Out followed by immediate self-report allowed us to report on two of the processes in Garfinkel et al.'s (Garfinkel et al., 2015) three-part neuropsychological model. First, this method of reporting was useful in being able to relay interoceptive sensibility, the subjective experience of internal processes which is usually reported through self-report questionnaires. Contrary to previous findings that people with autistic process have challenges with accurately sensing the body's physiological state (Elwin et al., 2012; Quattrocki & Friston, 2014), we found that most clients in this small-scale study reported possessing varying degrees of interoception and were able to verbally describe their internal sensations and perceptions following the Step-Out task. Further, clients with autistic process were able to access and express a range of bodily sensations, such as pain, temperature, muscle tension, heartbeat perception and affective touch. It is possible that the difference between our and previous findings is due to an important difference in procedure. Before asking clients how they felt, we guided them in performing a specific physical task. This structured activity can reduce the potential anxiety that may accompany an open-ended request to describe feelings and sensations.

Also, similar to more recent findings indicating that emotional difficulties in autism is associated with alexithymia rather than autism per se (Gaigg et al., 2018; Shah et al., 2016) our study found that the clients with autistic process who expressed a lack of interoceptive connection also reported accompanying alexithymia difficulties as they were unable to locate, label or express their emotions. We did not set out to test this and future studies employing the Step-Out technique to assist clients in accessing and reporting interoceptive sensibility should consider using alexithymia measures. However, as part of a larger outcome study the first author is tracking emotional change across treatment in both cognitive and affective empathy for self and other using the experiential observer measure, the Client Emotional Processing Scale for Autism Spectrum (CEPS-AS, Robinson & Elliott, 2016).

Second, we found that, when using this technique, clients with autistic process who were able to relay interoceptive sensibility demonstrated varying degrees of interoceptive awareness and could expand upon their internal experience through metacognitive explanations. Our clients engaged in complex explanations of how they were able to understand and use this to regulate their states and to monitor the changing impact this had on their interoceptive processing. We did not test the accuracy of interoceptive awareness and future studies may wish to explore this aspect further. In fact, this was an exploratory study presenting clients with autistic process with a technique to use which was not attached to an assessment of their competence, with no pressure to perform accurately or judgment given to their responses. We simply wanted to understand how clients with autistic process experienced the Step-Out to ascertain its utility as an interoception difficulty task marker within Emotion-Focused Therapy adapted for clients with autistic process. To this aim, we found that introducing the Step-Out task at the beginning of each therapy session not only allowed us to gain an insight into each client's experiential processing, an indicator associated with positive outcomes in therapy, but also it served as a helpful aid to transition. We found that the Step-Out technique did facilitate clients with autistic process to transition from the stress and anxiety of getting to the therapy group and social gathering demands

to the main task of group psychotherapy. Hence we propose the Step-Out technique is a useful aid in supporting clients with autistic process to transition from a high anxiety state to a calmer, more internally focused oriented state in preparation for working in psychotherapy. For this client population, this is a potentially useful micro-task within group psychotherapy process, which is the focus of ongoing research.

As noted above, one client felt overwhelmed the first time she tried the Step-Out. In our experience with embodied work, we have noted that sometimes clients are very cut off from their bodily felt experience. For them, the first contact with that experience is novel and can be frightening. As we can see, as the client continued practicing the Step-Out, the overwhelming reaction went away, and instead she reported a cooling feeling. We speculate that the Step-Out can give clients a sense of mastery over their bodily experience, which no longer feels alien, and thus becomes safe. This has the potential to helping clients with autistic process to become more embodied with self, which may lead to enhanced expression of needs, desires, fears and wants through the body and an increased ability to self-soothe when feeling escalated or agitated.

Another client reported pain relief, notably along with an awareness of its location (neck and back), trigger ('as soon as I go anywhere on public transport') and process ('it's the tension'). We think that the Step-Out helps reduce muscle tension, which in turn reduces pain. Another way in which the Step-Out can help reduce pain is through promoting awareness of the body, which can both reduce somatization and improve coping.

The client who said, 'I know what you mean by neutral; I'm the same as you', was using his interoceptive emotional awareness to connect more deeply with another client. The addition of the Step-Out in Emotion-Focused Therapy for clients with autistic process (Robinson & Elliott, 2017) provides a space for shared experience of neurodivergent intersubjective connection. This can also be viewed as an example of resonance. In client-centered and experiential therapies, resonance is an element of therapist empathy. It refers to a way of experiencing, whereby what the client expresses elicits a bodily felt sense in the therapist (Vanaerschot, 2007). Agazarian provided a definition that is not restricted to therapists: 'Resonance is an undefended experience that is generated within the self and triggered in response to oneself or another; resonance is most like attunement (Stern, 1985)' (Agazarian, 1997, p. 53). She emphasized the role of resonance among members in group therapy. This is apparent in the example of the client who expressed, 'I know how you mean . . .'. He was using his interoceptive awareness not only to become aware of his own reactions, but also to connect with another group member's experience. The benefits here are two-fold. First, as clients with autistic process are vulnerable to trauma-related experiences due to difficulties recognizing their own and others' emotions (Robinson, 2018), it creates space for enhancing interpersonal attunement. We found that the Step-Out created space for both neurotypical-neurodivergent intersubjectivity (therapist-client) which promotes a sense of caring acceptance and self-validation as well as neurodivergent-neurodivergent intersubjectivity (client-client) which ultimately promotes a shared sense of experience, which reduces one's sense of aloneness. Second, this allows the group process to move forward with cohesion.

Finally, we would like to draw a contrast between the Step-Out and other bodily focused interventions. As noted in the introduction, some interventions involve instructing clients to direct their attention to their bodies (e.g. to their breathing, to their trunk overall, or to a specific sensation). This kind of intervention is often beneficial. However, they involve the

crossing of a psychological boundary. It is as if the therapists' instructions enter inside the client's body-mind. Clients with autistic process, and perhaps other clients, can experience this as intrusive. The Step-Out technique does not have this drawback. We are not asking people to do anything with their attention. We are only asking them to move their bodies in a particular way. However, the process does have the effect of directing clients' attention to their bodies. It thus facilitates the process without pressure.

There are a number of limitations inherent in this study. First, one major limitation is that the first author delivered the Emotion-Focused Therapy as well being the main researcher in analyzing the data. We are aware that this potentially limits the credibility of our findings. However, it should be noted that our aim is to report our findings which are tentatively drawn from this initial explorative enquiry. We do not make any causal claims that the Step-Out is responsible for increasing interoceptive functioning, just that it appears to have potential as a useful experiential task and a process guide to deepening ones sense of embodiment. It could also be argued that the authors were invested in portraying only positive experiences of doing the Step-Out. However, this is not the case as we used all responses in the analysis and that for some they expressed they did not experience any internal changes. A further limitation may be due to the demand characteristics of the task as an individual and group pressure. It is recognized that clients are asked to say 'what do you feel?' and therefore it may be that they feel pressure to provide a verbal response as opposed to it being the Step-Out that elicited body awareness. Further, by asking people collectively may lead to a group think phenomenon. Both these issues require further investigation. This study has limited generalizability to other young adults with autistic process due to the small number of participants and heterogeneity of the spectrum. However, these preliminary findings provide promising support for the utility of the Step-Out task to help clients with autistic process recognize, express, and regulate their internal states. We tentatively propose that within stage one of case formulation for clients with autistic process comments the Step-Out acts as a useful experiencing task that supports our interoception marker working hypothesis. As such, it not only helps shift client attention across therapeutic tasks but to integrate sensory-body awareness and become more embodied with self.

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No potential conflict of interest was reported by the author(s).

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## Appendix 1: Step-out observer checklist

| Individual steps of the Step-Out Task   | Perceived level of Competency |          |         |
|---|-------------------------------|----------|---------|
|   | Failing                       | Emerging | Passing |
| 1. Find a space in the room where you can stand alone, with space between you and other group members   |                               |          |         |
| 2. Stretch out your arms to see if you have enough room to move without touching anyone standing close to you   |                               |          |         |
| 3. Listen to my instructions and or look at me (the therapist) demonstrating the actions (or both) which ever you find most helpful, now:   |                               |          |         |
| 4. Stand in an upright position with your feet apart and parallel, aligned with your hip bones.   |                               |          |         |
| 5. Allow your facial muscles to relax and have your eyes open looking straight ahead, at the level of the horizon.  |                               |          |         |
| 6. I (the therapist) am going talk you through the following action and when doing this you should try to have your breathing (respiratory rhythm) synchronized (in time) with the movement of your arms:   |                               |          |         |
| 7. Inhale and extend your arms, and lift them in front of your body with your fingers interlinked loosely, tracing a sort of “generous arc” over your head, bending your elbows as your hands reach behind your neck. [the therapist demonstrates this action while the inhalation is synchronized with the speed of the lifting arms]. |                               |          |         |
| 8. Pause and hold the pose  |                               |          |         |
| 9. Release your breath through slightly open lips, and now bend your arms in synchrony with your exhalation until they return to the original position. All the breath should be exhaled.   |                               |          |         |
| 10. Inhale and extend your arms, and lift them in front of your body with your fingers interlinked loosely, tracing a sort of “generous arc” over your head, bending your elbows as your hands reach behind your neck.  |                               |          |         |
| 11. Pause and hold the pose   |                               |          |         |
| 12. Release your breath through slightly open lips, and now bend your arms in synchrony with your exhalation until they return to the original position. All the breath should be exhaled.  |                               |          |         |
| 13. Inhale and extend your arms, and lift them in front of your body with your fingers interlinked loosely, tracing a sort of “generous arc” over your head, bending your elbows as your hands reach behind your neck.  |                               |          |         |
| 14. Pause and hold the pose   |                               |          |         |
| 15. Release your breath through slightly open lips, and now bend your arms in synchrony with your exhalation until they return to the original position. All the breath should be exhaled.  |                               |          |         |
| 16. Inhale and extend your arms, and lift them in front of your body with your fingers interlinked loosely, tracing a sort of “generous arc” over your head, bending your elbows as your hands reach behind your neck.  |                               |          |         |
| 17. Pause and hold the pose   |                               |          |         |
| 18. Release your breath through slightly open lips, and now bend your arms in synchrony with your exhalation until they return to the original position. All the breath should be exhaled.  |                               |          |         |
| 19. Inhale and extend your arms, and lift them in front of your body with your fingers interlinked loosely, tracing a sort of “generous arc” over your head, bending your elbows as your hands reach behind your neck.  |                               |          |         |
| 20. Pause and hold the pose   |                               |          |         |
| 21. Release your breath through slightly open lips, and now bend your arms in synchrony with your exhalation until they return to the original position. All the breath should be exhaled.  |                               |          |         |
| 22. Touch your face with both hands, apply gentle massage-like movements from the center of your face outwards.   |                               |          |         |
| 23. Shake the whole of your body  |                               |          |         |