

Section 1: Theory and Research

Self-Determination Theory as a Suitable Theoretical Basis and Measurement Approach for Psychodrama Interventions

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Psychodrama as a group therapy and intervention technique is based on role-plays as a way of rehearsing life. It has 100 years of history, and it has been widely used in different life domains and purposes since then. On the other hand, sometimes it has been criticized for lacking the methodological rigor of modern psychological science. Qualitatively and quantitatively, including a case study, we aim to show the effectiveness of psychodrama using a motivational science framework theoretically and empirically. We discuss why psychodrama is effective from an applied social psychological perspective—that is, to demonstrate that psychodrama fits well with self-determination theory (SDT), one of the renowned theories of human motivation, wellbeing, and development. Therefore, this article theoretically integrates those two streams of discussions in one vein of explanation: Psychodrama is effective because in many ways it is supportive of basic psychological needs via play and volitional action, which is necessary for autonomous functioning as depicted by SDT. We test and elaborate on this argument with a case study of a psychodrama group, with the three points of measurements taken before and after the group process as well as 2 years later in follow-up. We found expected and unexpected results regarding autonomous functioning and its associated variables as self-compassion and authenticity throughout time. We discuss the findings for further advancement of theory and practice of both psychodrama and SDT as well as its implications for partially supported hypotheses to guide further evidence-based research attempts in psychodrama.

KEYWORDS: Psychodrama; self-determination theory; basic psychological needs; well-being; action methods.

Relying on the spontaneity, creativity, and action potential of human beings, psychodrama has been found effective in many domains as a therapy tool, as a training tool, as an assessment tool, and as a social mechanism change tool in times of transitions. However, psychodrama has been criticized sometimes for

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lacking a theoretical background or empirical evidence. Yet, for many scholars, psychodrama with a history of 100 years itself is indeed a theory backed with a century of evidence, whereas for many others, psychodrama is a technique that relies on other great schools such as psychoanalytic, behaviorist, cognitive, dynamic, dialectic, and system approach theories and therefore should be further studied as an evidence-based practice. With increased interest and movement toward evidence-based practice, psychodrama practitioners and researchers have started to combine theory and practice to show its effectiveness in contemporary scientific ways blending with its historical own theoretical roots. Therefore, in this study we aim to (a) provide a theoretical and empirical explanation of why psychodrama is effective using self-determination theory (SDT), a worldwide known motivation and wellness approach; (b) address the concerns about whether it is or can be an evidence-based practice; and (c) point out the potential risks that, on one end, psychodramatists might fail to slip toward concluding psychodrama is “magical” rather than “scientific,” and on the other end, might get obsessed with mere quantitative methods toward concluding psychodrama fails to be proven as effective.

To start, we want to briefly explain the philosophical and historical underpinnings in the development of psychodrama so that we can bridge how it fits the contemporary scientific approaches of human motivation and well-being, especially SDT.

PSYCHODRAMA: MAGIC OR SCIENCE

J. L. Moreno (1972), the founder of psychodrama, had expansive goals that were concerned with all aspects of living and the maximizing of human potential, rather than just symptom relief. Therefore, psychodrama goes beyond the therapy room toward development and growth in every human and community sphere (Wilson, 2011). According to J. L. Moreno and Zerka Moreno (1969),

[P]sychodrama enables the protagonist to build a bridge beyond the roles *s/he* plays in *his/her* daily existence, to surpass and transcend the reality of life as *one* lives it, to get into a deeper relationship with existence, to come as close as possible to the highest form of encounter of which *s/he* is capable. (p. 29, italics added)

Although it might sound as if all of a sudden or after a long while as if a magic touch happened, group members do transform through some playful rituals. The philosophy and observation-based evidence have some deeper roots in it.

Creativity, spontaneity, and action are the three main propositions of psychodrama that enable this transformation by encouraging acting out the conflicting roles of inter- and intrapersonal experiences, with a group leader who helps the participants put the parts back together again. Because the psychodrama stage is a place where one's identity can expand through surplus reality, one can test out their future dreams of lives as well creatively, or one's past can be brought into the present, and relived differently (Z. T. Moreno,

Blomkvist, & Rutzel, 2014). This breach of fantasy and reality is what Moreno called “a healthy dose of madness” that we believe enables group members to autonomously enact upon desires, conflicts, fears, and joys, and competently develop mastery over them via relationships with other roles.

Psychodrama enables the individual to build a bridge beyond the roles related to daily life, to experience these roles with transcendence, to establish a deeper relationship with the self, and to reach the highest form of his potential (Moreno & Moreno, 1975). This, in our view, is not *self-actualization* that can be reached after some other survival needs, but *self-determination* primarily by being able to reveal the true self no matter what one is going through, despite disparities, inner and outer conflicts, wars, immigrations, marginalizations, and psychopathologies. Following this legacy, there is a growing literature suggesting that positive psychology concepts can be studied through psychodrama regardless of the negative life experiences (e.g., Orkibi, 2019; Tomasulo, 2019). Likewise, unlike the classical motivation theories, SDT does not establish a hierarchy between needs or motives; it speaks of the necessity and integrity of these needs for a healthy (in)congruence in the self-presentation where psychological needs are necessary not to survive but to thrive.

Some of the most important points emphasized by researchers about the effectiveness of psychodrama are as follows: Psychodrama is not the therapy of the group, but an individual therapy for everyone carried out within the group (Pio-Abreu & Villares-Oliveria, 2013, p. 127), and it is psychodynamic as well as behaviorist—that is, it can be modified by temperament, role, and behavior according to the individual’s specific needs. That is, psychodrama has methods and concepts that are highly flexible, can be shaped according to the current needs of the participants, and can be used in harmony and integration with other psychology theories and practices (Blatner, 2000). In addition, it aims at growth and development beyond the therapy room; it is very effective in transferring the acquisitions to real life (Wilson, 2011), which seems to fit SDT research. In this respect, this article is not to show psychodrama is effective. Rather, the originality and novelty of this study is its elaborative potential by addressing *why* psychodrama is effective within the framework of SDT and to give an idea in terms of future applications and uses.

SDT: A SCIENTIFIC FRAMEWORK OF HUMAN FLOURISHING AND MOTIVATION

Self-determination theory is a macro theory of human motivation that has social, developmental, and clinical implications and is used in many areas (Deci & Ryan, 2008). According to one of its subtheories called basic psychological needs theory, satisfying three basic psychological needs is essential for the psychological development, integrity, and well-being of people, whereas frustration of these needs can cause ill-being. The positive and negative outcomes of satisfaction and frustration of these needs respectively are portrayed through hundreds of research studies (R. M. Ryan, Deci, Vansteenkiste, & Soenens, 2021; Vallerand, 2021). These basic psychological needs are expressed

by the theory as the need for autonomy, relatedness, and competence (Deci & Ryan, 2002). There is a bold vein of the theoretical and empirical literature on SDT, highlighting that to make a therapy, an intervention, a change manipulation, etc., effective and flourishing for its receivers, it must be delivered by supporting the basic psychological needs (i.e., autonomy, competence, relatedness) of participants/clients. That is, three basic needs should be met to sustain self-determination in the form of autonomous functioning and vitality as well as behavioral accomplishment. Anything else that is need-frustrative is subject to failure for effectiveness and such need frustration is associated with negative outcomes, even to the development of psychopathologies (R. M. Ryan, Deci, Grolnick, & La Guardia, 2006). In a cycle, the more need-support and the less need-thwart people experience, the more autonomous functioning they have in life, whereas the more people can autonomously function, the more need satisfaction and less need frustration they perceive in life (Sheldon, Ryan, & Reis, 1996).

Although psychodrama was noted as one of the humanistic perspectives that consider motivation and autonomy in counseling and therapy (R. M. Ryan, Lynch, Vansteenkiste, & Deci, 2011), to our knowledge, no published theoretical and empirical study has captured basic psychological needs and autonomous motivation with psychodrama so far. However, psychodrama, in general, is known for its ability to transfer the growth and integration potential of clients to real life, as noted above, lending support for the rationale of testing this link between the propositions of psychodrama and SDT. Also, Moreno himself noted that the self is an “autonomous healing center” and that psychodramatists’ purpose is to help a protagonist touch this autonomous healing center (Giaccomucci, 2021).

To briefly explain in SDT terms, the need for *autonomy* includes perceptions that one’s actions are self-consistent and spontaneous (i.e., not controlled by an external agent). The need for *relatedness* expresses feelings of connectedness, and meaningful reciprocity to important others, not in the form of dependency but as healthy responsiveness and trust. The need for *competence* entails the experiences of producing the desired effects effectively and reaching the results with mastery. Applied studies show that it is important to address these three needs in psychological interventions. Therefore, whatever the intended change is in the target audience, these three basic needs must be met for this to happen volitionally (which is the autonomous motivation as depicted by SDT) and to transfer the intervention context into real-life sustainably (Lynch, 2012).

According to SDT, autonomy evolves into a continuum related to the extent to which one self-regulates (R. M. Ryan & Deci, 2000a, 2000b, 2000c). When the rationale for actions and behaviors is self-evident, that is, autonomously regulated, individuals can exhibit a congruent profile and can be compatible with themselves. On the other hand, at the other end of this continuum, when one cannot be autonomous (i.e., heteronomous), the individuals regulate themselves externally, present themselves with an extrinsic arrangement in a profile that is incompatible with themselves, cannot reflect

their values and truths, and cannot claim their wants and needs. This signifies a controlled motivation, contrary to autonomous motivation. Sometimes, this can be up to an even more extreme status in which nonregulation prevails at all, that is an impersonal motivation, in which the person drifts away from the behavior and does not have a reason to pursue either intrinsically or extrinsically. This resembles the act-hunger as depicted by Moreno, where spontaneity is blocked with passivity.

Such motivational inclinations may have a disposition that sustains one's life and a chronic course. Less controlled and more autonomous self-regulation is associated with an increased psychological well-being (e.g., positive affect, life satisfaction, meaning in life, and individual growth) and a reduced ill-being (negative affect, dependent self-esteem, depression, and anxiety) in life (Weinstein, Przybylski, & Ryan, 2012). Such a portrayal can be summarized as exhibiting an autonomous functionality about life, where one can be spontaneous and show his/her true self. This is not suppression or ignoring of negative things in life. Rather, it is simply a state where the self is not contingently valued due to possible negative and positive events in life. In this profile, the individuals are in line with their destiny, they are not open to control, and their life does not flow independently of themselves.

The compatibility of SDT and psychodrama is apparent to us in many ways. First, SDT suggests that the spontaneous tendency of people as active organisms to play, explore, and therefore expand their competencies and capacities is unfortunately diminished in many contexts, and that means the intrinsic motivation is undermined. However, this innate tendency to act in the form of autonomous motivation should have been facilitated for better functioning and sustainable well-being. This is, in psychodramatic terms, what we call being stuck, resistant, or unable to flexibly take a healthy role and blockage of creativity. Rather, both in psychodrama and SDT, a spontaneous self that is creative and determinant of one's actions is desired.

Second, SDT suggests those basic psychological needs should be supported so that people "can be active and infused with vitality, showing interest instead of becoming passive, disengaged, or resistant" (R. M. Ryan & Deci, 2017). This means, in psychodramatic terms, one needs to be warmed up enough and ready to act via playfulness. In that sense, people's basic psychological needs are what sun, water, and soil are to a plant. To blossom, these needs must be met so that the plant can be warmed up to flourish further. Similarly, a protagonist needs to be warmed up, supported to explore his or her potential, and encouraged to rehearse life in the safe space of a group.

Third, SDT focuses on human autonomy as an experience of choicefulness and freedom; therefore, within meaningful relationships, one can learn and develop new efficient roles, and safely express these existing or newly developed competencies. Although other big theories of psychology focus on these needs separately (e.g., attachment theorists show the importance of relatedness, self-efficacy research shows the importance of competence, and lifespan research shows the importance of the development of autonomy), in SDT these three needs are intertwined and equally important for effectiveness in life. Supporting

this notion, a psychodrama group can create a perfect venue for such competency development through role-taking, role-playing, and role-creating. This is because a psychodrama group is a psychologically safe space of action, tele, and sociometric push and pulls among roles and among group members where everyone can exercise their autonomy not in an independent way but through a genuine human encounter.

The Group as a Social Context

The basic assumption of SDT is that all people have natural, innate, and constructive tendencies to develop a holistic self; however, this requires supportive environments (Deci & Ryan, 2002; Niemiec, Soenens, & Vansteenkiste, 2014). Otherwise, various studies show that non-supportive environments will disrupt optimal development and psychological health, alienated functionality, and a state of illness (R. M. Ryan & Deci, 2008). Because, in environments with external pressures, people engage in behaviors to reach a reward or avoid a punishment. In cases where there is no intrinsic motivation, these needs cannot be met, and a state of well-being cannot be achieved in the long term. An example would include, but not be limited to, the social pressures, guilt, and humiliation created by the process of trying to escape the guilt of doing or not doing something with external motivation (Welters, Mitchell, & Muysken, 2014).

In that sense, SDT posits that the interpersonal contexts differ in terms of their influence depending on whether individuals are autonomous versus controlled. The concept of autonomy support entails whether a person of authority (e.g., a teacher, coach, therapist) takes the other's (e.g., a student's, athlete's, client's) perspective, acknowledges the other's feelings, and provides information, structure, and choice while minimizing the use of pressures and demands (R. M. Ryan & Deci, 2017). An autonomy-supportive therapist might, for example, provide clients a safe space with necessary information while acknowledging their emotions, encouraging their mastery toward change in their way. In contrast, a therapist who is controlling puts pressure on the clients to behave in particular ways, either through coercive or seductive techniques that generally include implicit or explicit rewards or punishments. An example would be a therapist who gives clients strict behavioral assignments in a particular way and makes them feel ashamed when they fail to comply with them.

These are the findings of psychotherapy and motivation research known so far (e.g., Michalak, Klappheck, & Kosfelder, 2004). However, what has been unknown is the supportiveness of the group that one belongs to, instead of an authority figure of one-up position. That is, our focus is not to measure to what extent the *therapist* is need-supportive; previous studies already showed that it has a positive effect in almost every school of therapy (R. M. Ryan & Deci, 2017). Rather, here we aimed to measure to what extent a *therapy group* itself can be a source of basic psychological need support as an explanation of why psychodrama is effective.

Psychodrama and SDT

Remember that the purpose of this study was to elaborate that the effectiveness of psychodrama as a therapeutic approach relies on the autonomous functionality of group members in different and similar agendas, which can be observed via revealing their authentic selves and teaching them to feel compassion for themselves in the face of life's difficulties. Considering that all psychodramatic processes are based on autonomous action in which members can use their spontaneity and creativity in relationship with each other, it seems possible to achieve this goal through psychodrama based on SDT.

Self-determination theory, which constitutes the concepts and theoretical background of this article, tells us that an autonomous self is well associated with self-compassion and authenticity concepts. To briefly state, an authentic self (e.g., Lenton, Bruder, Slabu, & Sedikides, 2013; Lynch, 2004; R. M. Ryan & Deci, 2004; W. S. Ryan & Ryan, 2019) and self-compassion (e.g., Gerber & Anaki, 2021; Guertin, Barbeau, & Pelletier, 2020; Gunnell, Mosewich, McEwen, Eklund, & Crocker, 2017; Shepherd & Cardon, 2009) are characteristics of autonomous motivation when basic psychological needs are met.

According to Kernis and Goldman (2006), authenticity is when people can continue their daily life according to their reality, that is, their essence, without being inhibited. Deriving from the empirical results in many domains, Kernis and Goldman (2006) emphasized that the authentic self consists of four elements that are interrelated but represent different dimensions, which are expressed as *awareness*, *unbiased processing*, *authentic behavior*, and *relational authenticity*. Such authenticity is a portrayal of self-determined self and autonomous functioning; therefore, we believed that it would be increased during our psychodrama intervention as people's basic psychological needs are supported.

Likewise, the theme of self-compassion (Neff, 2003) is also relevant to autonomous functioning. Considering that each group participant may have different stressors and internal and external constraints, the problem may arise that "oversized" standard solutions may not be sufficient. Rather, the literature indicates interventions need to be adapted to the specific needs of individuals from all age groups (Tandon, Dariotis, Tucker, & Sonenstein, 2013). In this case, rather than an intervention that deals with a relatively fragile and contextual concept such as self-esteem (Kernis, 2003) or one that involves a specific issue, such as communication skills, it is an intervention to address the individual's capacity to cope, whatever the distress. Therefore, we believed it would be more convenient for each group member to utilize according to their individual needs. In that sense, self-compassion is a balanced openness to one's own pain and grief, and suffering (Neff, Kirkpatrick, & Rude, 2007; Neff, Rude, & Kirkpatrick, 2007). However, to do this with care and kindness toward oneself, to adopt a ruthless and understanding attitude about one's inadequacies and failures means to realize that all these are common human suffering instead of isolation (Neff, 2003).

In our viewpoint, psychodrama promises to enhance autonomous functioning, self-compassion, and authenticity via its techniques. For example,

for neutral processing and awareness, the transitions between me and you, tele from me to you, and concepts of self-presentations of me and myself are important. Likewise, behavioral authenticity can be mirrored during warm-up games, where participants can deal with the authentic and autonomous aspects of their selves with doubling from other group members. Through group-oriented psychodrama and protagonist games, liberation from controlled and oppressive parts can also be experienced. While the members can distinguish the parts they do not feel like their own (i.e., introjections), they can feel that they are part of a great whole, with the common sense of humanity that they are not the only ones who suffer from it. These can be brought not only to the cognitive level but also to behavioral consciousness through sharings, role, and identification feedback. In a similar vein, the individual can follow the auxiliary ego at the points where he/she gets stuck or gets caught up, experiences new roles by changing roles, and tastes common humanity and universality with doubling, mirroring, and role reversing to be role-trained for being more autonomous, compassionate, and authentic. These are the characteristics of self-compassion, and although these are taught in cognitive therapies, it may not be possible to live out experientially. All of these characteristics may reduce the likelihood of the members experiencing the repetitions of difficulties they cannot get through in their personal and interpersonal processes, as well as making them feel that they are not alone in solving their current problems with all their spontaneity. Therefore, our first hypothesis was that psychodrama would enhance these characteristics.

H1: Psychodrama group members will posit increases in autonomous functioning, self-compassion, and authenticity from Time 1 (T1) to Time 2 (T2) that will sustain from T2 to Time 3 (T3).

We believe that psychodrama in many instances can promote these characteristics since it looks like it covers the ARC (autonomy, relatedness, and competence) of SDT. Therefore, the aim of our study was to show that psychodrama is promising to test with SDT in many points; its potential for plenty of exercises via play (as a child's play is ultimately the purest form of *autonomy* exertion), its provision by testing and acting out the world by mirroring/doubling and vicarious learning with *competence*, perspective taking via role reversal as well as the courage for sharing and feedback and constituting a new social capital for *relatedness* support. We expect that the impact of such psychological need-support can be observed via increased self-compassion and authenticity as a correlate of *autonomous functioning* even after the intervention ends.

H2: The need-support provided by the group will be associated with autonomous functioning, self-compassion, and authenticity in T3.

Lewin (1945) denoted that "there is nothing more practical than a good theory" emphasizing the close tie between social research and social reality... Therefore, consolidating a democratically dynamic group atmosphere with a need-supportive climate would lead to basic need satisfaction and enable a new ground for its individual figures to develop a self-determined social presentation to commit their actions accordingly. In turn, this autonomous motivation

would sustain maintenance further in real life, beyond the intervention context. This brings us to our final hypothesis.

H3: The autonomous functioning, self-compassion, and authenticity in T3 will predict higher need satisfaction and lower need frustration in life.

METHODS

Procedure

The call to participate in the study was made via social media. Those who volunteered for this study were informed that this study was not a treatment group, but an experiential personal growth group where people who were passing through different life stages could share their differences and similarities. Although we did not exclude those who were currently receiving psychological treatment from the group, we made sure that the candidates with any psychological disorders and emotional disturbances were still monitored by their primary therapists and that these professionals agreed upon their patients' participation in this group.

The intervention was 20 sessions of group work based on the propositions of role theory and psychodrama techniques where the concepts of basic psychological needs of SDT, self-compassion, and the authentic/true self were emphasized frequently during the processing of each session. The instruments we used in line with the aims of this study were theoretically and empirically determined to be suitable for use from previous validity and reliability studies. At the beginning of the group, the participants filled out an informed consent form, which briefly explained the aims and process of this study and stated the ethical framework. Through this form, people were informed that there would be no harm in participating; however, they could leave the study at any point if they wanted to without any consequences or punishments. Following this, before we started, each member filled the measurement tools as a pretest.

The participants filled out these same scale forms as a posttest after the 20 sessions of group work were completed as well. Also, the participants filled out the same form 2 years later as a follow-up for the effectiveness of the intervention. These forms are presented in the attachment.

Participants

Eighteen of the 31 applicants were eligible to join the group (in terms of time, availability, and referral from their therapist). Among the 18 people who were eligible in the preliminary screening interview, only 12 people were able to remain in the group for entire sessions. Those six people who did not participate either could not join at all or could not attend some of the sessions due to personal issues such as emergency family, work situations, or health problems (flu, migraine, etc.). The participants who were included in the analysis as fully engaged in the group work were all high socioeconomic status women, and their ages were ranging from 20 to 43 years.

Instruments

Although the representativeness of the sample is important for the quantitative part of a study, in terms of qualitative research purposes, the participants should be selected per the purpose rather than external validity (Polkinghorne, 2005; Turner, Cardinal, & Burton, 2017). In this vein, during this study, the subjective experiences of the participants were handled qualitatively as a case example. For this purpose, in Time 3, in addition to the follow-up measures, we asked the subjects to take the role of their own containing double and summarize their personal experiences within the group and after the group as a letter of self-reflection to their true selves. Along with the intercase comparisons and similarities, the intracase developmental change process was reflected by both the statements of the participants and the observations and interpretations of the researchers. Thus, as mentioned before, triangulation and complementarity, which are among the aims of a mixed-method study, were targeted by using qualitative and quantitative data simultaneously (Baki & Gökçek, 2012). These measurements were as follows.

Index of Autonomous Functioning. This theory-based and empirically validated scale, which was developed by Weinstein et al. (2012) to evaluate individual differences regarding autonomy, aims to measure the motivational tendencies of the individual reliably and effectively. The index of autonomous functioning (IAF) provides a brief and reliable measure of trait autonomy based on what SDT has accumulated over the years in the literature, and it has three theoretically derived subscales. These are high authorship/self-congruence, low susceptibility to control, and high interest taking (or, in other words, low amotivation).

Authorship/congruence reflects how much one views oneself as the author of behavior and experiences high consistency among behaviors, attitudes, and traits. Low susceptibility to control refers to the absence of internal and external pressures as motivators for behaviors. Lastly, interest-taking concerns an ongoing insight into oneself and one's experience in an open and nonjudgmental manner instead of finding any intention and initiative as uncertain, and the environment as uncontrollable. That is, one who is low in this facet is unmotivated.³ The internal reliability of Turkish adaptation of this scale was found to be $\alpha = .85$ for authorship, $\alpha = .72$ for susceptibility to control, and $\alpha = .84$ for amotivation (Kantaş, 2018).

Participants stated to what extent they agreed with each item on the 5-point Likert scale (1 = *never agree*, 5 = *strongly agree*). Each facet was calculated separately. For a high autonomous functionality, the first facet is expected to be high, and the second and third facet to be low.

³ Through personal communication with Ryan and Deci, for the purpose of this study, this last facet is named as "amotivation" which we thought represents the context of this subscale better.

Self-Compassion Scale. Developed by Neff (2003), the scale consists of three subdimensions about how people approach themselves in their difficult times. These are self-kindness versus self-criticism, common humanity versus isolation, and mindfulness versus over-identification. This scale was translated and adapted into Turkish taking into account the inconsistencies in the previous translations and the contradictions regarding the factor structure (Kantaş, 2013). The internal reliability of the Turkish adaptation of this scale was found to be $\alpha = .94$. Participants stated to what extent they agreed with each item on the 5-point Likert scale. (1 = *never agree*, 5 = *strongly agree*). Subdimensions are calculated by taking the average of each subdimension item. In order to calculate the total self-compassion score, self-judgment individuality and overidentification subscale items are reverse coded (1 = 5, 2 = 4, 3 = 3, 4 = 2, 5 = 1). Then all items are averaged into a composite score. Higher scores indicate high self-compassion.

The Authenticity Inventory. To assess the multicomponent authentic structure of the self, we used this inventory developed by Kernis and Goldman (2006), which has been found to be valid and reliable in the Turkish language (Imamoglu, Gunaydin, & Selcuk, 2011). This adapted short form consisting of 27 items under four factors were (a) relational authenticity (with eight items; e.g., “In general, I place a good deal of importance on people I am close to understanding who I truly am”); (b) unbiased processing (with seven items; e.g., “I find it very difficult to critically assess myself”—reverse coded); (c) awareness (with six items; e.g., “I know very well why I do the things that I do”); and (d) authentic behavior (with six items; e.g., “Even if others criticize or reject me for this, I try to be consistent with my personal values”). The Cronbach’s alpha values were found to be .76 for awareness, .77 for unbiased processing, .77 for relational authenticity, and .66 for authentic behavior. Participants stated to what extent they agreed with each item on the 5-point Likert scale (1 = *disagree completely*, 5 = *I totally agree*). Mean scores are computed for each subscale after reverse coding (1 = 5, 2 = 4, 3 = 3, 4 = 2, 5 = 1) the relevant items. Higher scores indicate high authenticity.

Perceived Need Support Scale. Developed by La Guardia, Ryan, Couchman, and Deci (2000), this instrument measures the need for fulfillment within relationships with specific others (the reliability with different target groups were ranging between .90 and .92). Participants rated on a 5-point Likert scale (1 = *almost never*, 5 = *always*) how well their basic needs are met when they are with specific target figures—namely, mother, father, romantic partner, best friend, roommate, and a significant other. Here for this study, items were reworded to assess the perceived need-support of members within the psychodrama group (e.g., “When I am with the group, I have a say in what happens and can voice, “my opinion,” autonomy; “When I am with the group, I feel controlled and pressured to be in certain ways,” autonomy—reverse; “When I am with the group, I feel very capable and effective,” competence; “When I am with the group, I feel inadequate and incompetent,” competence—reverse; “When I am with the group, I feel a lot of closeness and intimacy,” relatedness; “When I am with the group, I often

feel a lot of distance,” relatedness—reverse). By three items each for autonomy, competence, and relatedness, the total need satisfaction is assessed as the average of the nine items after reverse-coding the negative items. Higher scores indicate high need satisfaction in this group.

Basic Psychological Need Satisfaction and Frustration in Life Scale.

Accounting for the bright and dark sides of human functioning, this scale was developed by Chen et al. (2015) as a measure of unifying principle for growth and vulnerability (Vansteenkiste & Ryan, 2013). This 24-item questionnaire measures the satisfaction (four items per need; autonomy, competence, and relatedness) as well as the frustration (four items per need; autonomy, competence, and relatedness) of the three psychological needs. A shorter version of this scale has been validated by Van der Kaap-Deeder, Vansteenkiste, Soenens, and Mabbe (2017), with the most representative two items per each need for satisfaction and frustration separately. Therefore, the six items tapping into need satisfaction and the six items tapping into need frustration were averaged respectively to indicate the mean satisfaction and frustration of participants. Although this 12-item version was adapted to be used in diary studies, as it was associated with contextual and daily support and thwarting of needs, by changing the tense of verbs in each sentence, the items were restructured to capture the specific period for the purpose of this study following the suggestions of Deci and Ryan with personal communication (Kantas, 2018). The internal reliability of this scale is $\alpha = .76$ for need satisfaction and $\alpha = .79$ for need frustration. The participants were instructed to rate the items on the 5-point Likert scale (1 = *not at all true*, 2 = *a bit true*, 3 = *somewhat true*, 4 = *mostly true*, and 5 = *completely true*) regarding their experiences in general in that 2 years after the intervention. Higher scores indicated high need satisfaction and need frustration in life during the 2 years after the intervention for each subscale.⁴

RESULTS

Hypothesis 1 Results

We hypothesized that group members would experience increases in autonomous functioning, self-compassion, and authenticity from T1 to T2 and that these benefits would be transferred to real life as they would sustain from T2 to T3. Partially supporting these hypotheses, we found that the increase was significant for some of the constructs and facets, and in varying time differences. The changes across time can be seen in Figure 1 and are summarized in Table 1.

To specify these, self-compassion significantly increased from T1 ($M = 3.12$) to T2 ($M = 3.63$, $t(11) = -2.27$, $p < .05$, Cohen's $d = .89$) and did not change significantly from T2 to T3 ($M = 3.69$, ns) as expected.

⁴ As satisfaction and frustration lead to complimentary yet distinct outcomes (Chen et al., 2015), each subscale was used separately instead of reversing and making a composite score.

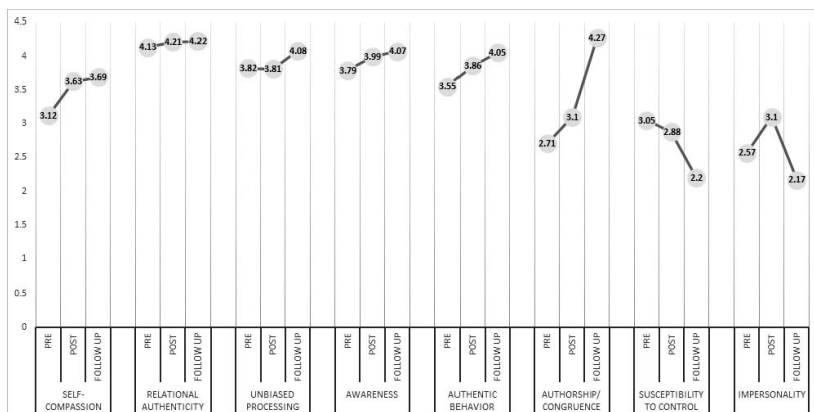


Figure 1. Change in values across times (Hypothesis 1).

When we looked at the facets of authenticity, we observed significant changes in unbiased processing, awareness, and authentic behavior as expected, but not in relational authenticity, contrary to our expectation. The slight increase in relational authenticity failed to show significance from T1 to T2, and T3 did not differ significantly from T2. Although unbiased processing was not statistically different from T1 ($M = 3.82$) to T2 ($M = 3.81$), the increase reached significance at T3 ($M = 4.08$) compared with T1, $t(11) = 2.73$, $p < .05$, Cohen's $d = .79$. Likewise, although the difference in awareness was not statistically significant from each other at T1 ($M = 3.79$) and T2 ($M = 3.99$), the increase reached significance at T3 ($M = 4.07$) compared with T1, $t(11) = 1.85$, $p < .10$, Cohen's $d = .54$, yet not in the conventional significance level of .05. Following the same pattern, authentic behavior did not change significantly from T1 ($M = 3.55$) to T2 ($M = 3.86$), yet the increase reached significance at T3 ($M = 4.05$) compared with T1, $t(11) = 1.83$, $p < .10$, Cohen's $d = .54$.

Considering the facets of autonomous functioning, we observed significant changes in authorship, susceptibility and amotivation. For authorship, the increase from T1 ($M = 2.71$) to T2 ($M = 3.1$) was not significant, yet from T2 to T3 ($M = 4.27$) the upward shift accelerated more, and it reached significance, $t(11) = -3.29$, $p < .01$, Cohen's $d = 1.36$. For susceptibility to control, the expected decline from T1 ($M = 3.05$) to T2 ($M = 2.88$) was not significant, yet from T2 to T3 ($M = 2.2$) the decrease reached significance, $t(11) = 4.98$, $p < .001$, Cohen's $d = .84$. For amotivation, contrary to what is expected, there was an increase from T1 ($M = 2.57$) to T2 ($M = 3.1$) and that was significant $t(11) = -2.01$, $p < .10$, Cohen's $d = .58$, although unconventionally. Yet, from T2 to T3 ($M = 2.17$), the direction significantly changed, $t(11) = 3.27$, $p < .01$, Cohen's $d = .93$, and it decreased, which was even lower than T1, $t(11) = -1.97$, $p < .10$, Cohen's $d = .57$.

Table 1. Changes before (T1), after (T2), and 2 years after (T3) the intervention (Hypothesis 1).

Construct	<i>M</i>
Self-compassion	
T1	3.12 ^a
T2	3.63 ^b
T3	3.69 ^b
Relational authenticity	
T1	4.13 ^a
T2	4.21 ^a
T3	4.22 ^a
Unbiased processing	
T1	3.82 ^a
T2	3.81 ^{ab}
T3	4.08 ^b
Awareness	
T1	3.79 ^a
T2	3.99 ^{ab}
T3	4.07 ^b
Authentic behavior	
T1	3.55 ^a
T2	3.86 ^{ab}
T3	4.05 ^b
Authorship/congruence	
T1	2.71 ^a
T2	3.10 ^a
T3	4.27 ^b
Susceptibility to control	
T1	3.05 ^a
T2	2.88 ^a
T3	2.20 ^b
Impersonality/amotivation	
T1	2.57 ^a
T2	3.10 ^b
T3	2.17 ^c

Note. Superscripts that do not share the same letter are statistically different from each other as analyzed by the *t* test.

Hypothesis 2 Results

We hypothesized that the basic psychological need-support provided by the group would be associated with higher autonomous functioning, self-compassion, and authenticity at T3. As can be seen from Table 2, we found that autonomy need support was only significantly correlated with relatedness need support ($r = .68, p < .05$) and competence need support ($r = .73, p < .01$). Partially supporting our hypothesis, relatedness need support was associated

Table 2. Correlations among variables at Time 3 regarding Hypotheses 2 and 3.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Amotivation	2.17	0.68												
2. Susceptibility	2.20	0.50	.25											
3. Authorship	4.27	0.55	-.43	-.01										
4. Authentic behavior	4.05	0.53	-.12	-.40	.15									
5. Awareness	4.07	0.57	-.27	-.49*	.67**	.48*								
6. Unbiased processing	4.08	0.69	-.22	.19	-.21	.17	-.29							
7. Relational authenticity	4.22	0.43	-.15	-.45	.16	.23	.29	-.14						
8. Self-compassion	3.69	0.50	-.38	-.24	.39	.72***	.36	.35	.27					
9. Autonomy support	4.22	0.81	-.43	-.21	.45	-.17	.36	-.38	-.32	.07				
10. Relatedness support	4.17	0.61	-.56*	.08	.34	-.25	.21	.06	-.12	.19	.68**			
11. Competence support	4.14	0.64	-.17	.15	.31	-.54*	-.06	-.60**	-.23	-.27	.73***	.37		
12. Need satisfaction	4.28	0.41	.11	.16	-.06	-.24	-.12	-.20	.09	.12	.18	.54*	.15	
13. Need frustration	1.75	0.43	.59**	.49*	.14	-.33	.12	-.39	-.27	-.52*	-.04	-.21	.21	-.07

* $p < .10$; ** $p < .05$; *** $p < .01$ (2-tailed); $N = 12$.

with decreased amotivation ($r = -.56, p < .10$). Competence need-support was associated with increased authentic behavior ($r = .54, p < .10$) and unbiased processing ($r = .60, p < .05$). Other associations failed to reach direct statistical significance. However, apart from these, when the intercorrelations were explored among the outcome variables, we observed significant patterns. Higher awareness was associated with lower susceptibility to control ($r = -.49, p < .10$), higher authorship ($r = .67, p < .05$), and higher authentic behavior ($r = .48, p < .10$). Higher self-compassion was associated with higher authentic behavior ($r = .72, p < .01$).

Hypothesis 3 Results

We hypothesized that these transferred benefits would be associated with the need satisfaction and frustration in life. Partially supporting this hypothesis, as can be seen from Table 2, we found that higher need satisfaction and lower frustration were significantly associated with some of the outcome variables. Specifically, relatedness need support in the group was associated with need satisfaction in life ($r = .54, p < .10$). On the other hand, decreased need frustration in life was associated with decreased amotivation ($r = .59, p < .05$), decreased susceptibility to control ($r = .49, p < .10$), and increased self-compassion ($r = -.52, p < .10$).

Qualitative Results

To make it easier to follow, we first gave the quantitative results, followed by qualitative results here. An online word cloud was used to visualize the centrality of themes by utilizing the word frequency and adjacency as can be seen from Figure 2. That means the more frequently the words were expressed by the participants and the more central these words were in the participants' experiences, the bigger the words are shown in the figure. We instructed the cloud generator to give a diamond shape so that it could picture the words close and distant to each end, as well as the central and the surrounding themes sociometrically, similar to diamonds of opposites. As can be seen from Figure 1, the most common themes that appeared in their personal experience summary in this group and after this group were as such: *hope, feelings and emotions, support, courage, difficulties, experience, understand, realize, long energy, best ends, think and feel, aware, good effects, lonely inside, found people, living impact, issues and decisions, wish and want, express versus suppress, changeability, accept, love, like, and learn.*

DISCUSSION

Moreno suggested that psychological problems arise when the natural tendency of acting out is blocked, and people cannot be their true selves when they lose their spontaneity as such (Giaccomucci, 2021; Moreno, 1956). Therefore, we argued that they might be lacking authenticity and autonomous functioning, and they might fail to compassionately approach their shortcomings. Aligning this, in our study, we

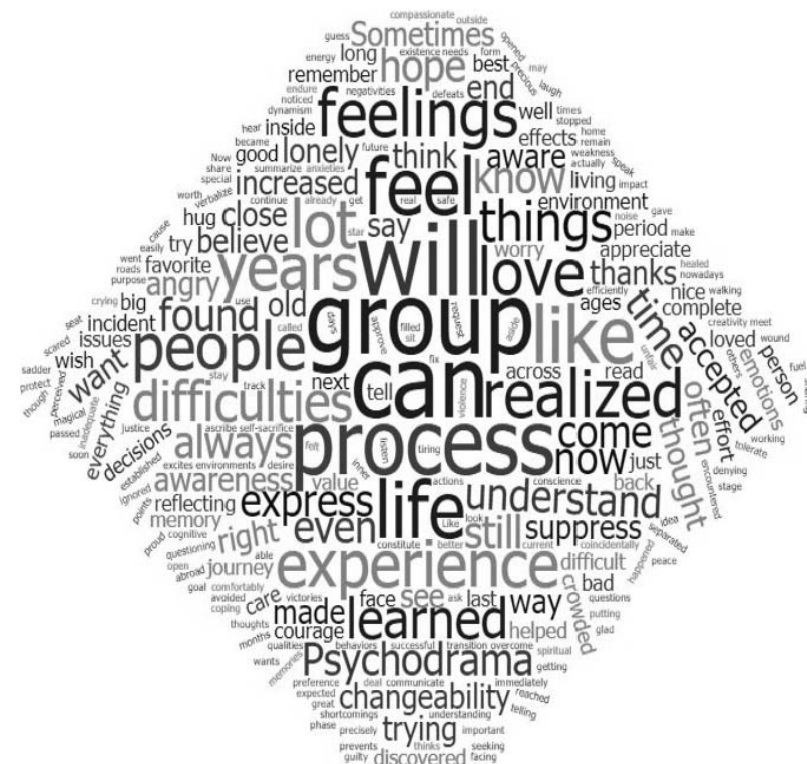


Figure 2. Qualitative themes as resembling diamond of opposites.

theoretically and practically aimed to show that psychodrama can be an effective way of increasing authenticity, autonomous functionality, and self-compassion based on the SDT perspective, which was tested for the first time. Therefore, we attempted to provide a social psychological base to explain why psychodrama aligns with best practices of the human motivation framework of SDT, which has shown its evidence-based effectiveness in almost every domain of psychology, not only from a psychotherapy perspective but from parenting to education, work-life to sports, politics to health (see R. M. Ryan & Deci, 2017 for a review).

We had significant and insignificant results as a change before and after our psychodrama intervention that was sustained in a follow-up 2 years later. Accordingly, we found that self-compassion increased, some facets of authenticity increased (the increase was quantitatively significant for some facets, and for the rest, the change was qualitative), and autonomous functioning increased. These findings partially supported our hypothesis, as some of the changes were observed at the end of the intervention but some changes were observed as a real-life transfer in follow-up, if not showing up right after the intervention.

The self-compassion potential of people is rooted in biological capacities including the desire to care for others, ability to recognize distress in others, sympathy and empathy, tolerance of distress (having a willingness to be aware of distress instead of avoiding or escaping from it), and a nonjudgmental emotional tone of warmth and this capacity can be applied to self (Baer, 2010). However, attempts to teach self-compassion from a mere cognitive or behavioral approach might be lacking in the transfer into real life. Rather, as we hypothesized, experientially acting for self-compassion in the psychodrama group was an inherent part of psychodynamic roles. In addition to approaching spontaneous and genuine compassion (e.g., to develop new roles or generalize old roles to new situations and to react flexibly in many different situations), psychodrama invited the group members to commit action and to try out or rehearse behavior with creativity and spontaneity (i.e., enactment and roleplay). This was one of the propositions that we tested in this case study. As expected, there was an increase from T1 to T2, which sustained its impact at T3.

Considering the nature of the variables/concepts used in this psychodrama group, it is still meaningful for us that there are qualitatively detected intrapsychic changes occurring within participants over time, even if not detected quantitatively right after the intervention ended. Rather, we observed the impact more evident at T3 as it happened for authenticity and its four facets: unbiased processing, awareness, authentic behavior, and relational authenticity. For example, speaking of awareness, group members were considering themselves as aware of their life even in the pretest. However, throughout the psychodrama group, they came to realize that the content and meaning of awareness changed. They noticed that they were in fact not aware of what they lacked awareness of. Therefore, they first realized and then became aware of their *unawareness*.

Likewise, through role reversals, they had the chance for perspective-taking, observing themselves from a distance, and relating with the other roles and themselves from another role; the participants expanded their capacity for unbiased processing and behaved more authentically. Therefore, their scoring of themselves at T2 reflected the more realistic self-evaluations where they potentially had a more inflated view of self at T1 with dysfunctional self-serving biases. Hence, we found it valuable and elaborative to observe this change at T3, which highlights the importance of backing up quantitative data with qualitative expressions of the participants themselves. In addition, it is noteworthy that we did not observe any quantitative change in relational authenticity, failing to support that hypothesis. However, their social atoms toward the last sessions of the intervention group, as well as their T3 experience summaries depicted a change. Although this change was not in the number of relationships, it was in the depth of connectedness and in the nature of their relationships with others. Participants also expressed disappointment regarding how some of their existing relationships were indeed toxic and trying to get rid of them or putting boundaries throughout this time was liberating on one hand, and isolating on the other hand, while placing their efforts to build better relationships at home, at work, at their own social circles, etc.

As an action-oriented intervention method, we believed psychodrama would increase autonomous functioning and we received support for this hypothesis.

However, to be specific, this change did not also appear on the day the intervention ended but was evident throughout the process. Participants became more congruent with who they were and claimed ownership of their lives as depicted by an increased authorship facet and decreased susceptibility to control facet at T3. Although it looks like there was no significant change from T1 to T2 in authorship and susceptibility, the qualitative and quantitative data together show why we observed that expected change from T2 to T3. During the sessions, participants did not stay the same in authorship and susceptibility. Rather, they realized how prone they were to regulate themselves according to external pressures and to act upon extrinsic motivation. The significant decrease in susceptibility to being controlled by outside factors as observed in follow-up measures gives us the idea that they worked deliberately to portray their authorship and congruence in life to exert their autonomous motivation and self-determined decisions and behaviors.

For amotivation, which is the last facet of autonomous functioning, we observed a somewhat different pattern contrary to our hypothesis. Quantitative data revealed that amotivation increased from pretest to posttest, and then decreased from posttest to follow-up to an even lower degree than pretest. We think this significant increase in amotivation from T1 to T2 does not tell us that psychodrama *increases* impersonality. Rather, we believe, participants *realized* how they lacked either internal or external reasons for some of their behaviors. Their qualitative experience summaries also depicted the same explanation. They gave examples of how clueless they were for some of their automatic pilot tendencies. They expressed how they were lacking a “why and how” to act upon some of their desires, dreams, and hopes (e.g., “I always thought I’d never accomplished that,” “I realized how I took this negative belief as granted and assumed that as if it is my fate,” “It took me a while to understand my resistance to accomplish it, indeed. Now, I dare to try, now I dare to fail, and I will make it”). In other words, they actively and deliberately had worked on those throughout the group, and it seems like their efforts paid off as can be seen from the reverse direction in change from T2 to T3.

Therefore, the results do not mean that group members increased their predisposition to impersonality and that they stayed prone to be controlled despite our psychodrama intervention. On the contrary, throughout this process, they realized how much they yielded to others, failed to take interest and action, and behaved under the control of others in their life. These findings highlight the importance of triangulating quantitative and qualitative data, as the mere fact that an intervention does not exhibit a statistically significant change should not mean that the intervention is ineffective, or even makes it worse. However, as seen here, change might not be captured quantitatively, yet it might have been observed qualitatively and sociometrically.

In our study, we aimed to show that this change is via the need-support that group members provided for each other. Supporting our second hypothesis, we found that autonomy need-support in the group was associated with relatedness and competence need-support from other group members. The relatedness support from group members was associated with less amotivation—

that is, lack of any regulation at all and not knowing why one does or does not do certain things decreased as the mutual connection between group members increased. In addition, the competence support from group members was associated with the participants' more unbiased processing and more authentic behavior, which are the two facets of authenticity—one of which is a social cognitive and the other is a social behavioral. This indicates how a group can serve as a motivational background for a positive shift after intervention for better functioning. Another thing that captured our attention was the lack of direct association of autonomy support with other concepts. This shows us that true autonomy support for one is not without relatedness and competence support. Since sometimes supporting one's autonomy can be easily confused by merely boosting one's freedom for the cost of relationships and recklessly waiving any responsibilities that require competencies, we believe this is specifically important to emphasize the interconnection of three basic psychological needs as depicted by SDT.

Finally, regarding the third hypothesis, we observed that these changes in participants were also associated with more need satisfaction and less need frustration in life even 2 years after the intervention. As expected, as amotivation and susceptibility to control decreased and self-compassion increased, participants reported less need frustration during the follow-up measures. In a similar vein, supporting our notion that the group provides a motivational base through its own relational support among members and new safe human interactions, people experienced more overall need satisfaction in the following 2 years after the intervention.

LIMITATIONS

Although there is a tendency to support all our hypotheses, data fails to statistically support some of them, and there are some other limitations. This might be due to several reasons. First of all, we worked with a small data set. Therefore, the findings here cannot be considered generalizable to a larger population, especially regarding the sample size and the nature of the data. The group was not homogeneously representative of a population, rather it was a mixed group of 12 women. The change can only be representative of this group of people, not to a larger extent.

Second, we had no control group; therefore, we do not know the “baseline variance” if there were no intervention. Also, the sample was not randomly selected; rather, it was a convenience sampling, where the first come were first served to our call on social media. In other words, a sample of 12 people is a small data set, and not sufficient for such statistical inference, but it gives an idea.

Third, we did not treat the data hierarchically. The mainstream analysis that we used here did not reflect the hierarchical nature of measurements nested within individuals and that these 12 people were not homogeneous nor controlled for any other variables. That is, there is not a fixed slope (growth) or intercept (starting point) for each participant. In other words, not everyone in the therapy group starts at the same point, neither does everyone have the same slope/pace of progressing. The data rather could have been treated with multilevel analysis

regarding the hierarchical nature of these data points, as three measurements (before the intervention, when the intervention was finished, and 2 years later follow-up) were nested in each individual.

Therefore, future studies might better benefit from controlling some of the variables for the sake of reducing the complexity of the model. For instance, this research could have been a random intercept random slope covariance mixed-level repeated measures model, if we had enough sample size and a randomized control group. However, the number of participants in the available data points was not enough for a conclusion. In addition, the fact that there was no control group makes it difficult to compare the natural variance that might arise with the serendipity of life.

CONCLUSIONS

Although SDT is an individual motivation theory about life, it is meaningful and unique in this respect that it was measured within the scope of an intervention that considered the “individual within a group” as attempted in this study. Thus, it is expected that the basic psychological needs of the individual will not only be met by the therapist/researcher but also an environment of receiving need satisfaction and providing need support will be created in line with their interactions with group members. According to the SDT, not only receiving support, but also giving support is important for human well-being (Deci, La Guardia, Moller, Scheiner, & Ryan, 2006; Weinstein & Ryan, 2010). A difficulty of individual support/intervention studies is the risk of not finding the external environment that will support change or well-being other than the laboratory, clinical, or educational environment.

That is, group members possibly can only receive support from the therapist/trainer/researcher but cannot find support in their community and social environment. However, as seen by the word cloud, the support and acceptance group processed together, and the mental/emotional representation of the group was persistent even after 2 years. For this reason, if we consider the group as a separate unit of analysis, we can say that the change and development of the individual also require dealing with a group to which they feel belonging (Cummings, Bridgman, & Brown, 2016).

Thus, this type of group intervention is important for individuals in their social environment, beyond the group setting. It is thought to have a protective and supporting effect. This is about the transfer of motivation, skills, and achievements in general to real life and its functionality for the individual needs of each participant. The proposition that *psychodrama is a microcosm in which the real world can be experienced* supports this. Also, the core of the word diamond entails a motto for this group, which is “*Group can process life.*” This, we believe, is an indicator of the spontaneity and the creativity of the group. This is what we as the researchers had no control over (i.e., we did not manipulate it) but had the chance to observe and facilitate for participants’ process toward their own cultural conserve. This is in line with Moreno’s idea that a psychodrama leader is not a therapist but a facilitator for the protagonists to be their own therapists. Also, this fits well with the notions of SDT, indicating

that we cannot motivate people, yet we can create conditions and environments in which people can unleash their self-motivation toward their growth and flourishing goals.

Overall, these results highlight a few things. First, we need to back up quantitative data with qualitative data when we are talking about the therapeutic process. This is because what an increase and a decrease mean can vary across people. There were statements of some participants such as “Awful things have happened within these 2 years, and I think my well-being declined a little bit. Yet, if I were not reimagining the support of the group, I would have been even worse. I wish the group could continue still so that I can handle the current issues even better.” This, on one hand, indicates that a therapist or an intervention cannot control what will happen to participants after all (e.g., life cannot be a randomized controlled trial as in pure evidence-based research), and on the other hand, it encourages us to think that an intervention can be a protective factor against new coming negative life experiences.

Second, people’s understanding of psychological concepts can change with the intervention. For instance, there looks like there’s no single increment in relational authenticity. However, the self-report of qualitative data suggests that participants indicated that they thought they were true in their relationships, but with the group process, they realized that they were not in fact much aware of how some of their close relationships were draining and costing their vitality. This was not a visible increase in the authenticity measurement, yet evident in how their social atoms had shifted.

To summarize, psychodrama sounds magical, yet it is not a magic but scientific application with a blend of artful dynamic processes within the person and within the group. However, we need to combine qualitative and quantitative methods to show evidence of effectiveness. We believe the road toward evidence-based practice needs to be backed up with practice-based evidence as such more and more often via the triangulation of qualitative and quantitative research. Our study was an attempt to meet this need with a case study, which we hope will inspire other studies with more methodological rigor, following the directions here and yet considering the limitations noted here as well.

REFERENCES

- Baer, R. A. (Ed.). (2010). Self-compassion as a mechanism of change in mindfulness- and acceptance-based treatments. In *Assessing mindfulness and acceptance processes in clients: Illuminating the theory and practice of change*, (pp. 135–153). Oakland, CA: New Harbinger Publications, Inc.
- Baki, A., & Gökçek, T. (2012). Karma yöntemi araştırmalarına genel bir bakış. *Elektronik Sosyal Bilimler Dergisi*, 11(42), 1–21.
- Blatner, A. (2000). *Foundations of psychodrama: History, theory, and practice* (4th ed.). New York City, NY: Springer Publishing Company.
- Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J., . . . Mouratidis, A. (2015). Basic psychological need satisfaction,

- need frustration, and need strength across four cultures. *Motivation and Emotion*, 39(2), 216–236.
- Cummings, S., Bridgman, T., & Brown, K. G. (2016). Unfreezing change as three steps: Rethinking Kurt Lewin's legacy for change management. *Human Relations*, 69(1), 33–60.
- Deci, E. L., La Guardia, J. G., Moller, A. C., Scheiner, M. J., & Ryan, R. M. (2006). On the benefits of giving as well as receiving autonomy support: Mutuality in close friendships. *Personality and Social Psychology Bulletin*, 32(3), 313–327.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne*, 49(3), 182–185.
- Gerber, Z., & Anaki, D. (2021). The role of self-compassion, concern for others, and basic psychological needs in the reduction of caregiving burnout. *Mindfulness*, 12(3), 741–750.
- Giacomucci, S. (2021). *Social work, sociometry, and psychodrama: Experiential approaches for group therapists, community leaders, and social workers*. Singapore: Springer.
- Guertin, C., Barbeau, K., & Pelletier, L. (2020). Examining fat talk and self-compassion as distinct motivational processes in women's eating regulation: A self-determination theory perspective. *Journal of Health Psychology*, 25(12), 1965–1977.
- Gunnell, K. E., Mosewich, A. D., McEwen, C. E., Eklund, R. C., & Crocker, P. R. (2017). Don't be so hard on yourself! Changes in self-compassion during the first year of university are associated with changes in well-being. *Personality and Individual Differences*, 107, 43–48.
- Imamoglu, E. O., Gunaydin, G., & Selcuk, E. (2011). Individuation and relatedness as predictors of the authentic self: Beyond gender and cultural orientations. *Turk Psikoloji Dergisi*, 26(67), 27–48.
- Kantaş, Ö. (2013). *Impact of relational and individual self-orientations on the well-being of academicians: The roles of ego-or eco-system motivations, self-transcendence, self-compassion and burnout* (Master's thesis). Middle East Technical University, Ankara, Turkey.
- Kantaş, Ö. (2018). *“What I need is more than a job”: A self-determination theory based profile of disconnected and working youth in Turkey* (Doctoral thesis). Middle East Technical University, Ankara, Turkey.
- Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, 14(1), 1–26.
- Kernis, M. H., & Goldman, B. M. (2006). A multicomponent conceptualization of authenticity: Theory and research. *Advances in Experimental Social Psychology*, 38, 283–357.

- La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology*, 79(3), 367–384.
- Lenton, A. P., Bruder, M., Slabu, L., & Sedikides, C. (2013). How does “being real” feel? The experience of state authenticity. *Journal of Personality*, 81(3), 276–289.
- Lewin, K. (1945). The research center for group dynamics at Massachusetts Institute of Technology. *Sociometry*, 8(2), 126–136.
- Lynch, M. F., Jr. (2004). *Variability of self-concept across personal relationships: The role of culture, basic psychological needs, and authenticity in China, Russia, and the United States* (Doctoral dissertation). University of Rochester, Rochester, New York.
- Michalak, J., Klapheck, M. A., & Kosfelder, J. (2004). Personal goals of psychotherapy patients: The intensity and the “why” of goal-motivated behavior and their implications for the therapeutic process. *Psychotherapy Research*, 14(2), 193–209.
- Moreno, J. L. (1956). System of spontaneity and creativity. In J. L. Moreno (Ed.), *Sociometry and the science of man*. Beacon, New York: Beacon House Press.
- Moreno, J. L. (1972). *Psychodrama volume 1* (4th ed.). Beacon, New York: Beacon House Press.
- Moreno, J. L., & Moreno, Z. T. (1969). *Psychodrama: Vol. 3. Action therapy and principles of practice*. New York, NY: Beacon House.
- Moreno, Z. T., Blomkvist, L. D., & Rutzel, T. (2014). *Psychodrama, surplus reality and the art of healing*. New York, NY: Routledge.
- Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2(3), 223–250.
- Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, 41(1), 139–154.
- Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality*, 41(4), 908–916.
- Niemiec, C. P., Soenens, B., & Vansteenkiste, M. (2014). Is relatedness enough? On the importance of need support in different types of social experiences. *Human Motivation and Interpersonal Relationships*, 77–96.
- Orkibi, H. (2019). Positive psychodrama: A framework for practice and research. *The Arts in Psychotherapy*, 66, Article 101603.
- Pio-Abreu, J. L., & Villares-Oliveria, C. (2013). How does psychodrama work? How theory is embedded in the psychodramatic method. In C. Baim, J. Burmeister, & M. Macial (Eds.), *Psychodrama: Advances in theory and practice* (pp. 127–137). New York, NY: Routledge.
- Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of Counseling Psychology*, 52(2), 137–145.

- Ryan, R. M., & Deci, E. L. (2000a). The darker and brighter sides of human existence: Basic psychological needs as a unifying concept. *Psychological Inquiry*, 11(4), 319–338.
- Ryan, R. M., & Deci, E. L. (2000b). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67.
- Ryan, R. M., & Deci, E. L. (2000c). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
- Ryan, R. M., & Deci, E. L. (2002). Overview of self-determination theory: An organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3–33). New York, NY: University of Rochester Press.
- Ryan, R. M., & Deci, E. L. (2004). *Autonomy is no illusion: Self-determination theory and the empirical study of authenticity, awareness, and will*. In J. Greenberg, S. L. Koole, & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (p. 449–479). New York, NY: Guilford Press.
- Ryan, R. M., & Deci, E. L. (2008). A self-determination theory approach to psychotherapy: The motivational basis for effective change. *Canadian Psychology/Psychologie Canadienne*, 49(3), 186–193.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory*. New York, NY: Guilford Press.
- Ryan, R. M., Deci, E. L., Grolnick, W. S., & La Guardia, J. G. (2006). The significance of autonomy and autonomy support in psychological development and psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology* (pp. 795–849). Hoboken, NJ: John Wiley & Sons.
- Ryan, R. M., Deci, E. L., Vansteenkiste, M., & Soenens, B. (2021). A legacy unfinished: An appreciative reply to comments on self-determination theory's frontiers and challenges. *Motivation Science*, 7(2), 120–121.
- Ryan, R. M., Lynch, M. F., Vansteenkiste, M., & Deci, E. L. (2011). Motivation and autonomy in counseling, psychotherapy, and behavior change: A look at theory and practice. *The Counseling Psychologist*, 39(2), 193–260.
- Ryan, W. S., & Ryan, R. M. (2019). Toward a social psychology of authenticity: Exploring within-person variation in autonomy, congruence, and genuineness using self-determination theory. *Review of General Psychology*, 23(1), 99–112.
- Sheldon, K. M., Ryan, R. M., & Reis, H. T. (1996). What makes for a good day? Competence and autonomy in the day and in the person. *Personality and Social Psychology Bulletin*, 22(12), 1270–1279.
- Shepherd, D. A., & Cardon, M. S. (2009). Negative emotional reactions to project failure and the self-compassion to learn from the experience. *Journal of Management Studies*, 46(6), 923–949.
- Tandon, S. D., Dariotis, J. K., Tucker, M. G., & Sonenstein, F. L. (2013). Coping, stress, and social support associations with internalizing and externalizing

- behavior among urban adolescents and young adults: revelations from a cluster analysis. *Journal of Adolescent Health*, 52(5), 627–633.
- Tomasulo, D. J. (2019). The virtual gratitude visit (VGV): Using psychodrama and role-playing as a positive intervention. In *Positive psychological intervention design and protocols for multi-cultural contexts* (pp. 405–413). Cham, Switzerland: Springer.
- Turner, S. F., Cardinal, L. B., & Burton, R. M. (2017). Research design for mixed methods: A triangulation-based framework and roadmap. *Organizational Research Methods*, 20(2), 243–267.
- Vallerand, R. J. (2021). Reflections on the legacy of self-determination theory. *Motivation Science*, 7(2), 115–116.
- Van der Kaap-Deeder, J., Vansteenkiste, M., Soenens, B., & Mabbe, E. (2017). Children's daily well-being: The role of mothers', teachers', and siblings' autonomy support and psychological control. *Developmental Psychology*, 53(2), 237–251.
- Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, 23(3), 263–280.
- Weinstein, N., Przybylski, A. K., & Ryan, R. M. (2012). The index of autonomous functioning: Development of a scale of human autonomy. *Journal of Research in Personality*, 46(4), 397–413.
- Weinstein, N., & Ryan, R. M. (2010). When helping helps: autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology*, 98(2), 222–244.
- Welters, R., Mitchell, W., & Muysken, J. (2014). Self determination theory and employed job search. *Journal of Economic Psychology*, 44, 34–44.
- Wilson, J. (2011). Psychodrama and cognitive behavioral therapy: Complementary companions (part 2). *The Group Psychologist*, 21, 10–17.