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Mentalizing the University experience: an exploratory study on the relationship between university students' reflective functioning, psychological well-being and academic performance

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Abstract

In a Clinical Health Psychology perspective, which focuses on the promotion and maintenance of mental and physical health of the individuals, mentalization (operationalized as reflective functioning; RF) may be conceived as a psycho-social competence associated with psychological well-being and good outcome treatment. In the university contexts, some studies demonstrated that the students' academic achievements may be related, on one hand, to RF improvements, on the other, to psychological well-being. Nevertheless, there is a lack of studies exploring RF in relationship with both academic achievement and psychological well-being regarding university students. This study aims at assessing the effectiveness, in terms of RF, psychological well-being and academic performance, of ten counselling groups addressed to 63 underachieving university students lagging behind in their studies. The counselling adopted an innovative narrative methodology, the Narrative Mediation Path (NMP), which aims to improve mentalization and psychological well-being in order to produce an impact on the students' academic performance. The Reflective Functioning Questionnaire (RFQ), the Psychological General Well-Being Index (PGWBI), and the Academic Performance Inventory (API) were administered at the beginning and at the end of the counselling. Results showed an overall improvement of students in genuine mentalization, especially of the hypomentalizing dimension of RF, an increase of the psychological well-being index and its sub-dimensions (except for the General Health dimension) and an improvement of the academic performance. This study highlighted the effectiveness of the NMP methodology for students' success and suggests the utility of planning clinical psychology interventions aimed at enhancing mentalization in the university contexts.

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1. Introduction

This study is rooted in a Clinical Health Psychology perspective which turns its attention to the exploration of health processes in psychological interventions. Clinical Health Psychology can be defined as both an applied and a substantive field of psychology. In fact, it applies knowledge and techniques in order to prevent, but also assess and treat, both mental and physical disorders (Millon, Green, & Meaghler, 1982). Furthermore, Clinical Health Psychology focuses on the promotion and maintenance of mental and physical health of the individuals (Dicé et al., 2017). The adjective "clinical" to health psychology underlines its operational purposes (Papas, Belar, & Rozensky, 2004) and intervention guidance (Belar, 2008). Thus, Clinical Health Psychology undertakes to provide and test interventions in order to intervene for treating illness and disorders, but also for promoting individual's global health and psychological well-being (Freda et al., 2019; Martino et al., 2019). In this perspective, a key aspect that characterizes Clinical Health Psychology is its focus on the effectiveness and efficacy of clinical interventions (Sirigatti & Casale, 2008).

From the perspective of Clinical Health Psychology, mentalizing (Bateman & Fonagy, 2016) is a psycho-social competence to be developed and promoted with individuals who face difficult developmental tasks and crises (Marchetti, 2014). Mentalizing, also operationalized as Reflective Functioning (RF; Fonagy et al., 1998), is the imaginative ability to interpret one's own and others' behaviors on the basis of intentional mental states, such as desires, wishes, needs, opinions (Bateman & Fonagy, 2006). Mentalizing is an interactive ability (Luyten et al., 2020), as it develops in the context of interaction with others. Its optimal development depends on the quality of attachment relationship. Specifically, the early attachment relationships with caregivers reflect the degree to which one's subjective experiences are properly mirrored by attachment figures through a contingent and marked response.

Mentalizing is a multidimensional capacity which is composed by four polarities (Fonagy & Luyten, 2009): a) automatic/controlled; b) self/other; c) external/internal; d) cognitive/affective. Automatic mentalizing refers to an implicit, non-verbal and reflexive process of recognition and understanding of mental states, while controlled mentalizing refers to an explicit, verbal and reflective process. The self/other polarity is referred to the object of the mentalizing process, which can be focused on one's own or others' mental states. Similarly, the external/internal dimension refers to the focus of mentalizing, which can be on the external cues regarding mental state (e.g., face expressions, behaviors, etc.) or on inner cues about mental states (e.g., motives, desires, etc.). Cognitive mentalizing refers to the capacity of perspective taking and understanding of the representational nature of mental

states, while affective mentalizing regards emotional empathy, subjective self-experience, and mentalized affectivity. A genuine mentalizing involves a balance between these dimensions and a flexible use of them depending on the requests of a particular social context. Mentalizing has both *trait* and *state* features and the persistent imbalance between dimensions may be a sign of potential failure in mentalizing (Fonagy & Luyten, 2018). Typically, mentalizing can be reduced in contexts that trigger strong emotions and experiences of insecurity which convey negative representations of the self. Such experiences may convert adaptive modes of mentalizing functioning into inflexible and non-mentalizing modes that ultimately turn into rigid and stereotypical interpretations of one's relationship with contexts (Esposito, Karterud, & Freda, 2019; Esposito et al., 2020, Freda & Esposito, 2020). Thus, with the increased level of arousal in a given context, the balance between polarities may be lost. For example, patients with Borderline Personality Disorder (BPD) are characterized by impairments in mentalizing, such as loss of controlled mentalizing in favor of automatic mentalizing, overreliance on affective focus and on external cues (Luyten et al., 2020). In this perspective, Mentalization-Based Treatment (MBT) was originally developed to treat BPD patients and their mentalizing impairments (Bateman & Fonagy, 2016). MBTs are manualized and structured interventions aimed at improving mentalizing capacities by focusing on the patient's mental states in the *hic et nunc* of the therapeutic relationship. MBTs emphasize on fostering of the mentalizing capacity for salutogenesis and resilience in patients (Luyten et al., 2020). Recently many MBTs have been developed for different types of patient. In fact, MBTs are also useful for those subjects defined as high functioning individuals, whose mentalizing capacity is not impaired by the presence of a psychopathology, but may be reduced in specific contexts or relationships (Fuggle et al., 2015). High functioning individuals may temporarily present some imbalances between the mentalizing polarities with regard to a specific context or relationship that may trigger strong emotions. Indeed, restoring mentalization with high functioning individuals may aim to renovate individuals' sense of agency, i.e. their sense of being the responsible author of one's own actions.

In addition, mentalization has also an impact on psychological well-being, since mentalization sustains a positive perspective on life, hope, and a sense of mastery (Allen, Bleiberg, & Haslam-Hopwood, 2003). Specifically, Hayden and colleagues (2018) found in a sample of patients with mental disorders that improvements in mentalization had an effect on interpersonal distress. Moreover, Antonsen and colleagues (2016) found in a sample of patients with borderline and avoidant personality disorders that patients with low RF before the treatment presented higher levels of symptomatic and interpersonal distress. This study also showed that mentalizing predicted the long-term clinical outcome of treatment. Indeed,

the common basis of MBTs is the idea that the promotion of mentalization can act as a protective factor for individuals and become a valid tool for prevention and promotion of psychological well-being. In this perspective, MBT interventions have both clinical and health purposes, thus restoring mentalization with high functioning individuals is a matter of Clinical Health Psychology (Luyten et al., 2020). As far as we know, despite the great interest showed towards psychological well-being and its connection with the mentalizing ability of individuals (Antonsen et al., 2016; Hayden et al., 2018), there is a lack of study in exploring such relationship in the university context. Moreover, to our knowledge, only a few studies have showed an association between psychological well-being and academic performance among university students (Chow, 2010; Cobo-Rendon et al., 2020).

Furthermore, the group has proved to be a valid and effective clinical device in MBT. From the perspective of MBT for groups (MBT-G; Karterud, 2015), the group has a key role in promoting mentalization, as it acts as a "training arena" (Karterud, 2011, 2015) for the enhancement of mentalization, replicating the intersubjective characteristics of the context in which this capacity is normally acquired. The group setting is more complex than the individual setting, thus MBT-G clinicians are encouraged in a more explicit manner to be authoritative, to structure the group process and to counter tendencies of the group towards non-mentalizing modes in order to achieve positive treatment outcomes (Karterud & Bateman, 2011). In MBT-G the clinician maintains the focus on interpersonal events in the group and on mentalizing processes, encourages a mentalizing turn taking and stimulates group members' mentalizing through exploratory questions by assuming the so-called not-knowing stance (Karterud, 2015). Moreover, each member of the group becomes a reflective mirror for themselves and for others (Esposito et al., 2017a, 2017b) and the mirroring function provided by the group can generate change both at the individual and intersubjective level (Esposito, Freda, & De Luca Picione, 2016). The group has an effect of resonance, which promotes a greater awareness and understanding of the members' experience, their emotions and behaviors, as well as a greater control over one's own actions. For this reason, numerous group interventions have been developed and implemented with high functioning individuals in different contexts (Migdley & Vrouva, 2014). For example, Twemlow and colleagues (2005) adopted the group setting to prevent incidents of bullying and violence in the school environment by proposing the Peaceful Schools Program. Moreover, some studies have demonstrated that mentalization also plays a key role in improving university students' academic performance (Esposito, Marano, & Freda, 2020; Esposito, Savarese, & Squitieri, 2018; Padykula & Horwitz, 2012). In fact, from a mentalization perspective, university students might understand how their own mental states affect their academic performance and

the achievement of learning goals, and this realization may have an effect on student learning outcomes (Esposito et al., 2020).

Despite the differences between the various MBT-Gs, these programs are an example of how mentalization can be promoted in different settings and how the group lends itself as a tool to promote this ability, sharing all a broader concept of mental health that sees the ability to mentalize as fundamental in terms of promoting psychological well-being. Although the increasing interest in promoting mentalization in Clinical Health Psychology, to date, there are no studies which explored how the enhancement of mentalization may be associated with the development of psychological well-being and the students' academic performance.

1.1 Objectives and Hypotheses

The aim of this study is to assess, in ten counselling groups addressed to underachieving university students, the effectiveness of the counselling in terms of the university students' mentalization (operationalized as reflective functioning; RF) and psychological well-being. In addition, this study aims at assessing if the counselling groups had an impact on the improvements of students' academic performance.

Based on the studies which demonstrated the relationship between RF and academic achievements (Esposito, Karterud, & Freda, 2019; Freda, Gonzàlez-Monteagudo, & Esposito, 2016; Padykula & Horwitz, 2012), or between RF and psychological well-being (Allen, Bleiberg, & Haslam-Hopwood, 2003; Antonsen et al., 2016; Hayden et al., 2018), we expect a parallel improvement of the RF, psychological well-being and academic performance after the counselling programs.

2. Materials and Methods

2.1 Participants

A total of 63 university students (M = 32; F = 31; *Mage* = 25.90; *SD* = 6.12) voluntarily participated in the counselling groups. Students were enrolled in 10 counselling groups offered by the SInAPSi (Services for inclusion and active participation of university students) Center of the University of Naples Federico II. The groups consisted of 4 to 13 participants. About 60% of the students was enrolled in a Bachelor Degree Course, 40% in a Master Degree Course. About 70% of students attended a scientific degree course, 30% a humanistic degree course. About 60% of the students was regularly enrolled, 40% was not regular and enrolled in many years beyond their course study (Italian 'fuoricorsisti').

The following table (Tab. 1) shows descriptive data for each group and for the total number of participants.

Table 1. Descriptive data of the sample

Group	N	M	F	Mean age	SD
Group 1	13	3	10	27.31	4.83
Group 2	6	4	2	23.17	2.78
Group 3	4	0	4	27.50	5.26
Group 4	7	3	4	26.71	6.80
Group 5	5	1	4	22.80	2.04
Group 6	7	4	3	34.00	10.67
Group 7	6	4	2	22.00	1.00
Group 8	5	5	0	22.80	3.76
Group 9	4	3	1	25.00	1.82
Group 10	6	5	1	23.33	2.73
Total	63	32	31	25.90	6.12

2.2 Research context

The group counselling adopted a narrative method, the Narrative Mediation Path (NMP), which aims at promoting mentalization among underachieving university students who present a discrepancy between their academic potentialities and their academic performance (Freda, Gonzalez-Monteagudo, & Esposito, 2016). The NMP is inspired by MBT-G (Karterud, 2015), as MBT-G is a flexible group approach that may be applied to several group settings and clients. Like MBT-G, NMP considers narratives and groups to be important devices in developing mentalization under the leadership of a mentalizing clinician. Moreover, MBT-G and NMP consider the group as a "training arena for mentalization" (Karterud, 2011, 2015), as members of a group are reflective mirrors offering different of viewpoints on the same experience. However, NMP counselling is a short-term intervention aimed at fostering

mentalization in specific contexts (e.g., underachievement of university students). Moreover, NMP is aimed at high functioning students who present temporary failures of mentalizing with respect to their university experience. Academic underachievers may be viewed as high functioning individuals as they do not show any impairment in their general mentalizing abilities, but they may display specific mentalizing failures due to some stressful university related tasks (e.g., failing an examination, problems with classmates or professors). Stressful tasks may increase emotional arousal and may also lead to switching to a rigid and stereotyped way of interpreting students' relation with the university (Esposito, Karterud, & Freda, 2019; Esposito, Marano, & Freda, 2020). Lower mentalizing may affect students' learning outcomes and, as a consequence, their academic success. Previous studies (Esposito et al., 2020) have demonstrated that the NMP showed a good integrity to the mentalizing group model; furthermore, it was demonstrated that in a single group intervention, improvements in students' mentalization were parallel to improvements in the students' academic performance (Esposito, Karterud, & Freda, 2019).

The NMP assumes that mentalizing improvements may influence the students' psychological well-being, as explicit and implicit mentalizing concur in developing some important aspects of the psychological well-being, such as a coherent and continuous sense of self, the awareness of one's own resources to set and achieve goals and, consequently, to ability to generate hope about the future. In fact, some studies showed an association between students' depression and low academic performances (Heshmati & Pellerone, 2018), suggesting that higher levels of psychological well-being are associated with better academic performances. NMP also assumes that mentalization may influence the students' sense of agency (Dimaggio et al., 2013); thus, an increase in mentalization may have an impact on the adoption of more strategic and goal-oriented actions performed at university. In other words, by enhancing students' understanding of how mental states can lead to poor academic performance, NMP aims to improve the students' sense of authorship of their actions and the ability to perform more effectively at university. Indeed, other studies showed that the sense of self-efficacy, a prerequisite for the development of the sense of authorship and agency, is associated with higher academic and scholastic performances (Filippiello et al., 2013; Sorrenti et al., 2014; Sorrenti et al., 2016).

NMP is a weekly, nine-session narrative group counseling (each session lasts about 2 hours) that integrates five narrative modes:

- metaphoric mode (first and second sessions): it involves maxims and proverbs, and the students are asked to choose one that represents their university experience (e.g., "He

who makes his bed must lie in it"). Metaphorical inputs are supposed to foster an initial representation of students' formative self-assessment and enhance their ability to identify their own mental states and those of others as constituents of these representations;

- iconographic mode (third and fourth sessions): the students are given six vignettes, each featuring a character engaged in a typical situation at university (e.g. enrolment, self-study, an informal moment at university), and students are asked to select one character and write a speech balloon containing the character's thoughts or feelings for each vignette. The iconographic mode is supposed to encourage reflections on different moments of the university experience and foster students' ability to recognize mental states associated with typical university situations;
- writing mode (fifth and sixth sessions): it involves three narrative assignments requesting to write a low point, a high point, and a decisional turning point in their university experiences. The writing mode encourages the students to analyze the relationship between their mental states and their past behaviour in order to *invert the direction of the mind* (Bateman & Fonagy, 2012), because the students have the possibility to think about their experiences from a different perspective;
- bodily mode (seventh session): the students are asked to create a sculpture from the bodies of all group members to reflect their future at university. The bodily mode promotes both *anticipatory mentalizing* (Bateman & Fonagy, 2012), that is, the competence for mentalizing future situations, and *embodied mentalizing* (Bateman & Fonagy, 2012), that is, of one's bodily sensations;
- agency mode (eighth and ninth sessions): students are asked to fill in a sort of action plan in which they indicate a goal they wish to achieve and the actions required for accomplishing it. The work on the mental states that underlie these actions helps participants to transform their mentalizing ability into the capacity to reverse their choices and to adopt goal-oriented behaviours that may be more appropriate for the university context.

One year after the end of the counselling, a follow-up session is planned.

The sequence in which the modes are presented fostered the emergence of a different representation of the formative self who is sharper, more contextualized, and action-oriented. Overall, the counselling promotes reflection on the university experience both through an

involvement of different sensory channels, and a continuous oscillation between the individual and the group narrative level.

The function of the group is crucial in the entire counselling. The NMP uses the group setting as a device that allows to amplify reflective processes. The group becomes an instrument of sharing, exchange and reflection that activates a dynamic circuit of continuous mutual feedback, and allows each member to question his/her point of view and promote new ones, identifying and possibly modifying the rigid or unjustified beliefs that can affect university performance without the student being aware of it (Esposito et al., 2017a, 2017b). Each group member becomes a mirror for themselves and others and the narrations produced by group members are shared and co-constructed inter-subjectively (Atkinson & Delamont, 2006; Gergen & Gergen, 1988; Reissman, 2008).

2.3 Measures

Academic Performance Inventory. In order to assess the impact of the counselling groups, the Academic Performance Inventory (API; Esposito, Freda, & Manzo, 2016) was administered to participants before and at the end of the program. The API consists of questions related to the university career of the participants (number of exams taken, European Credits Transfer System - ECTS - gained, the year of enrollment, the number of exams taken, etc). For the purpose of this study, we take into account the number of ECTS and the year of enrollment which allowed us to calculate the Academic Delay Index (ADI), which assessed the discrepancy between the number of ECTSs gained and the number of ECTSs expected to be gained based on the student's year of enrollment.

Reflective Functioning Questionnaire. In order to assess the students' RF ability, the Reflective Functioning Questionnaire (RFQ; Fonagy et al., 2016) was administered at the beginning and at the end of the counselling. The validated Italian version of the RFQ (Morandotti et al., 2018) consists of 8 items organized in two subscales, each containing 6 items (of the 6 items on each subscale, two are unique and four shared across the two scales), measuring the degrees of uncertainty (RFQ_U) and certainty (RFQ_C) about mental states. The RFQ_U subscale reflects the level of hypomentalizing, that has been defined as the tendency to develop poor or simplistic models of the minds of others and/or the self and it has been linked to a concrete thinking or psychic equivalent modes of functioning (Fonagy et al., 2016). The RFQ_C subscale reflects the level of hypermentalizing, that has been described as opposite to hypomentalization, thus the tendency to develop very complex and rigid models of the mind that, nevertheless, have poor correspondence to appropriate evidence (Fonagy et al., 2016). Hypermentalizing relates to a pretend mode of functioning, or

pseudomentalization, characterized by elaborated discussions about mental states with no authentic understanding of them. Genuine mentalizing is characterized, instead, by an observed ability to form relatively accurate models of the mind of self and others and a recognition of the opaqueness of mental states (Allen, Fonagy, & Bateman, 2008; Fonagy et al., 2002). Overall, individuals with an adequate RF can be expected to show some certainty about their own mental states and those of others and at the same time to be aware that their certainty should be conditioned by the acknowledge of mental states' opaqueness. Based on studies which adopted RFQ to evaluate the mentalizing ability in different samples (Badoud et al., 2015; Carrera et al., 2018; Cucchi, Hampton, & Moulton-Perkins, 2018; Morandotti et al., 2018), genuine mentalization can be identified by moderate scores on certainty subscale and low scores on uncertainty subscale. Clinical interventions are expected to present a positive outcome in terms of RF improvements if, from pre-test to post-test phase, there is an increase of certainty subscale mean score and a decrease of the uncertainty subscale mean score. The Italian validation study (Morandotti et al., 2018) confirms the psychometric properties of this questionnaire (internal consistencies were around the traditional cut-off of 0.70) and provides a preliminary support for the factorial invariance of the RFQ in clinical and non-clinical samples, as well as for the internal consistency and test–retest reliability.

Psychological General Well-Being Index. In order to assess the students' psychological well-being, the Psychological General Well-Being Index (PGWBI) (Grossi et al., 2006, 2014) was administered at the beginning and end of the counselling. The questionnaire consists of 22 items organized in 6 subscales:

- Anxiety (5 items), which assesses the perception of feeling tense, stressed and irritable (e.g. "Have you been bothered by nervousness or your "nerves" during the past month?");
- Depressed mood (3 items), which evaluates the perception of feeling demoralized, blue, downhearted ("I felt downhearted and blue during the past month");
- Positive well-being (4 items), which analyzes the perception of a general optimism and satisfaction for life ("How happy, satisfied, or pleased have you been with your personal life during the past month?");
- Self-Control (3 items), which assesses the perception of feeling masters of one's own actions and being able to direct one's own behaviors on the basis of goals relevant to the self ("Have you been in firm control of your behavior, thoughts, emotions or feelings during the past month?");

- General Health (3 items), which evaluates the perception of feeling unconcerned about one's own health and calm ("Have you been concerned, worried, or had any fears about your health during the past month?");
- Vitality (4 items), which analyzes the perception of being energetic and dynamic ("Did you feel active, vigorous, or dull, sluggish during the past month?").

The questionnaire provides both an index for each subscale and an overall index that allows to measure the subjective state of well-being or discomfort related to the emotional and affective sphere. The overall index allows to discriminate between 4 levels on a continuum 'well-being/psychological distress': scores from 0 to 60 indicate severe distress levels, which may accompany mental problems; scores from 61 to 72 indicate moderate distress levels; scores from 73 to 97 indicate non-distress levels; scores from 98 to 110 indicate positive well-being levels. The PGWBI, in its Italian version (Grossi et al., 2006), is a questionnaire with good psychometric properties: the internal consistency of the different subscales is quite high with Cronbach's alfa values between 0.61 and 0.85. In addition, the global index is particularly robust because the Cronbach's alpha never presented values under 0.90.

2.4 Procedures

The ten counselling groups were held during the academic years 2017/2018 and 2018/2019. They were conducted by three clinical psychologists and psychotherapists specifically trained on the use of the NMP methodology. The participation of the students was voluntary, and all the students signed an informed consent in accordance to the Italian Privacy and Data Protection Act (No. 196/2003), the ethical principles of the Italian Association of Psychology (AIP) and the Helsinki Declaration. Through informed consent, students agreed to use narrative materials, audio recordings of the sessions and data provided in questionnaires for educational and research purposes.

2.5 Data analysis

In order to evaluate the students' RF and psychological well-being, the T-test for paired samples was performed to assess if there were significant differences, from the pre to post-test phase, both of the RFQ_C and RFQ_U scores and the PGWBI overall index and its subscales.

In order to evaluate the improvements in the academic performance, at first, for each student, we computed the Academic Delay Index (ADI), previously presented, according to the following formula:

$$\text{Academic Delay Index} = \left(100 - \frac{GAINED\ ECTS}{EXPECTED\ ECTS}\right) x\ 100$$

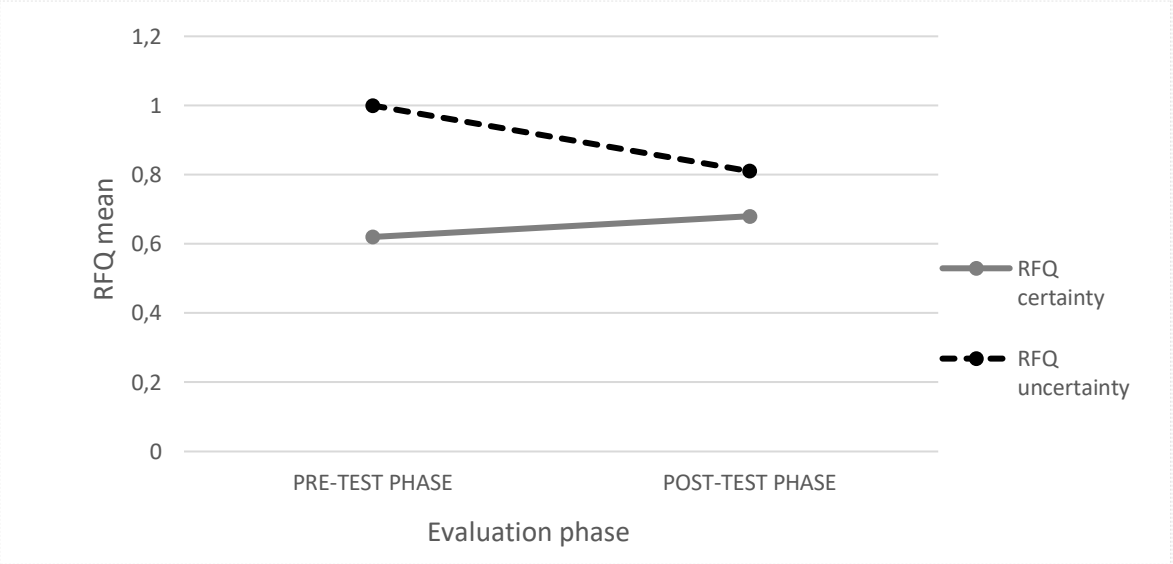
Secondly, the T-test for paired samples was performed to assess if there were significant differences of the ADI scores from the pre to post-test phases.

3. Results

3.1 Outcome results: Reflective Functioning

The analyses performed on the whole sample showed the expected positive trends, namely increasing certainty about mental states and decreasing uncertainty about mental states (see Fig. 1).

Figure 1. Descriptive trends of RFQ_C and RFQ_U mean scores from pre to post-test phase



The T-test for paired samples (see Table 2) demonstrated that the RFQ_U scores also showed a significant statistical decrease between the pre and the post-test phases, while the difference between RFQ_C scores was not significant.

Table 2. Mean, Z points, p-values and d-values of RFQ_C and RFQ_U from pre to post-test phase

RFQ certainty					**RFQ uncertainty**				
Pre-test Mean	Post-test mean	Z points	*p* value	*d* value	Pre-test Mean	Post-test Mean	Z points	*p* value	*d* value
0.62	0.68	-.677	.501	.153	1.00	0.81	2.795	**.007**	.519

Internal consistency, as measured by Cronbach's alpha, ranged from .65 to .70 for both subscales from pre-test to post-test, showing a sufficient reliability of the RFQ in this sample.

3.2 Outcome results: Psychological General Well-Being

The analyses performed on the whole sample showed a significant improvement (t = -6.983; p = .000; d = 1.307) of the overall psychological well-being index from a severe distress level (*Index Mean* = 58.86) to a non-distress level (*Index Mean* = 73.80).

Furthermore, there was a significant statistical improvement of each subscale, excepted for the General Health subscale (see Tab. 3).

Table 3. Descriptive, Z points, p-values and d-values of PGWBI overall index and subscales indexes from pre to post-test phase

Subscales	**Pre-test Mean**	**Post-test Mean**	**Z Points**	***p Value***	***d value***
Anxiety	12.35	16.30	-24.04	**.000**	1.150
Depressed mood	9.80	11.83	-5.33	**.000**	.984
Positive well-being	8.02	11.28	-6.23	**.000**	1.159
Self-control	8.27	10.35	-5.30	**.000**	.986
General health	10.97	11.52	-1.70	.094	.360
Vitality	9.50	12.30	-5.81	**.000**	1.099
Index	58.86	73.80	-6.98	**.000**	1.307

Generally, internal consistency ranged from 0.64 to 0.94, showing that the PGWBI is a reliable measure in this sample.

3.3 Impact results: Academic Performance

Analysis on the whole sample showed a significant reduction of the ADI, namely of the discrepancy between expected and acquired ECTS, indicating that students reduced the delay accumulated in previous academic years (t = 4.549; p = .000; d = .844). Thus, the sample presented a significant improvement in the students' academic performance.

Table 4. Mean, t, p-values and d-values of ADI from pre to post-test phase

Academic Delay Index				
Pre-test Mean	Post-test Mean	t	*p-value*	*d-value*
69	65	4.549	**.000**	**.844**

4. Discussion

This study showed a significant improvement in all the variables under study: a) certainty about mental states moderately increased along the counselling process, and uncertainty about mental states decreased significantly; b) the psychological well-being index significantly improved from a severe distress to a non-distress level, as well as all the subscales, excepted for General Health, which increased, but not significantly; and c) the students' academic delay reduced significantly.

Regarding RFQ findings, it is interesting to note that, before enrolling in the counselling, the students presented RF scores which suggest a previous tendency to hypomentalize, namely the sample presented a quite high score (1.00) on RFQ_U. This may imply that the students participating in the counselling previously showed difficulties in interpreting behaviors in terms of their and others' mental states, namely they presented very poor and simplistic models of mind. Thus, the significant decrease of uncertainty dimension may be considered an indicator of the counselling effectiveness in allowing the students to interpret their behaviors on the basis of intentional mental states. Nevertheless, as far as concerns the results on the RFQ_C (that increased but not significantly), we can hypothesize that the NMP was more effective in supporting students in developing some models of mind, rather than in reducing the rigidity and inaccurateness of the students' models of mind (that was reflected in the certainty dimension). It's also plausible to assume that the work on the individuals' inaccurateness and rigidity of models of mind requires much more time and that is difficult to reach due to the short length of the counselling.

Regarding PGWBI findings, it is important to underline that, before the counselling, the students presented a severe level of distress which reflected a high degree of suffering and discomfort related to their ineffective academic performance. As shown, there was a significantly improvement of the participating students who reached a non-distress level after the program, as well as a statistical improvement of all the subscales, except for the General

Heath subscale, which refers to concerns about one's own health. We can argue that health may not represent a typical issue in counselling with university students, as they do not turn to NMP counselling for health concerns, but because of academic difficulties and relational issues. Furthermore, we can note that, observing all the subscales, feeling of anxiety and depression reduced, while the perceived vitality and positive well-being increased. It is interesting to note that also the subscale of Self-control (the recognition of one's own agency) improved significantly. This finding may give support to the well-known relationship between mentalization and agency (Abbasi at al., 2019; Bateman & Fonagy, 2012, 2016; Fonagy & Allison, 2012) also in the university contexts; it is plausible to hypothesize that the students' ability to mentalize may have been associated with a renovate sense of ownership and responsibility for their actions, choices and self-determination.

In addition, the results showed that in the whole sample also the academic performance significantly improved in the post-test phase, showing that, as hypothesized, there was a parallel improvement of mentalization, psychological well-being and academic performance. Despite the analyses do not allow us to delineate causal relationship among the variables, it is possible to hypothesize that the improvements in RF and in perceived levels of psychological well-being may have had a positive impact on the students' academic performance. Specifically, we can imagine that, assuming a more genuine mentalizing perspective and taking a more agentic perspective towards the future may have influenced the students' perception of being more capable of implementing behaviors to achieve developmental academic objectives. As stated in the literature (e.g. Allen et al., 2003), improvements in mentalization produce a spontaneous sense of being in control of one's own actions, of responsibility for one's own choices and the relative feeling of being able to direct one's behaviors for purposes relevant to the self (Schimansky et al., 2010).

5. Conclusions and Limitations

This study highlighted the effectiveness of group counselling for university students as a tool for promoting mentalization, psychological well-being and academic achievements. Overall, the counselling seems to have fostered a shift from a passive and pessimistic representation of the self as university student to an optimistic and agentic dimension, namely a change from the representation of oneself as a student victim of events out of one's control to a student able to behave in a way that may reorient the course of events. We may hypothesize that counsellors offered a mentalizing model which may be internalized by the students and then adopted in the university context. An evaluation at a follow-up phase may inform us whether the change was maintained over time by students.

The findings of the current study might have some implications for clinical practice with university underachieving students. Within a Clinical Health Psychology perspective, it seems plausible to suggest that mentalizing group interventions would be an effective intervention in increasing mentalization as a protective factor against environmental critical demands. These interventions may encourage emotional literacy and emotion regulation, and they may facilitate reflection on interpersonal relationship patterns, by showing students how these dimensions affect emotional expression and academic behaviors.

This study presents some limitations. The main limitation concerns whether our findings are causally related, e.g. that certain mentalization improvements within NMP group program facilitated an increase in the individuals' psychological well-being, which in turn influenced their academic performances in a positive way. As this is not an experimental study, in future studies it is desirable to constitute a control group and test the assumptions about the relationships between variables with the use of Hierarchical Linear Models. Moreover, we are not able to determine whether the changes have endured over time or if they were simply a product of a facilitating group environment. Future studies will take into account the analyses of subsequent follow-up sessions to observe if changes in RF, psychological well-being levels and academic achievement are consistent and persistent over time. Other limitations concern the small sample of this study and the mean age intergroup variability. It is necessary to extend the sample in order to ensure that these results can be replicated in more groups. It may also be interesting to perform a process analysis on the transcripts of counselling sessions to obtain information about how change emerged along the process. Finally, despite the NMP assumes the key role of the group in promoting mentalization and psychological well-being, this study has not measured group variables (e.g., group therapeutic factors, group climate, etc.) which may have influenced the positive outcomes. Future studies will analyze such variables as possible moderators of the relationship between mentalization, psychological well-being and the academic performance.

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