

Volume 10, n 2, 2022

Articles

Sinapsi Academic Self-Management Training Group to Promote Well-Being with University Students

Maria Luisa Martino ¹, Raffaella Passeggia ¹, Maria Rosaria Di Natale ²,
Maria Francesca Freda ¹

Abstract

Introduction: Self-management (SM) is a concept aimed to manage of chronic patients. To date, SM has not been used and implemented within the university context. Within a positive psychology framework, SM is a key strategic competence, effective in the support of personal resources for the management of the relationship between the student and university. Within the SInAPSi Centre of Federico II University-Naples, authors have developed an innovative group training programme, SInAPSi Academic Self-Management Training (SAM), based on the acquisition and promotion of the strategy of SM composed of six weekly meetings held on the MTeams Platform. The aim of this study is to evaluate the efficacy of six group cycles of SAM conducted with 92 students.

Method: The General Self Efficacy Scale, Academic Motivation Scale, and SInAPSi Academic Engagement Scale have been administered in pre and post testing and a T-test for paired samples was performed by SPSS software.

Results: The results show that SAM has proven to be effective in improving significantly students' general self-efficacy and in realizing a more adaptive integration of university life into the private domain.

Discussion: Results suggest that the acquisition of competences in SM will support all kinds of students not only during their academic careers but also during their transition into the job market.

¹ Department of Humanities, University of Naples Federico II, Naples, Italy

² SInAPSi Centre for the Inclusion and the Active Participation of Students, University of Naples Federico II, Naples, Italy

E-mail corresponding author: marialuisa.martino@unina.it



Keywords:

Self-management; University; Well-being.

Received: 5 April 2022

Accepted: 3 August 2022

Published: 31 August 2022

Citation: Martino, M.L., Passeggia, R., Di Natale, M.R., Freda, M.F. (2022). Sinapsi Academic Self-Management Training Group to Promote Well-Being with University Students. *Mediterranean Journal of Clinical Psychology*, 10(2).

<https://doi.org/10.13129/2282-1619/mjcp-3416>

1. Introduction

In the last twenty years in the field of health and positive psychology, in particular in the management of patients suffering from chronic diseases, the concept of Self-Management (SM)

has been devised and developed (Swain et al., 2019). Within these contexts, SM is a competence that takes shape as an “umbrella key competence”, aimed at promoting resources of self-efficacy, self-control and the monitoring of one’s own health condition (Bandura, 1977; Lorig et al., 2001; Wright et al., 2003).

Lorig and colleagues (2009) have developed and evaluated the effectiveness of a training based on the development of SM skills for patients with chronic diabetes. Specifically, they organized and assessed an 8-week group course centred on the acquisition and implementation of the various skills that comprise the key competences of SM. The training showed beneficial effects in terms of increasing self-efficacy, improving communication skills in relation to doctors and other health professionals and enhancing personal activation with respect to the autonomous management of one’s own pathology and the adoption of healthy behaviors (Lorig et al., 2009). Lorig and Holman (2000) have indeed identified 5 core SM skills: problem solving; decision-making; resource utilization; forming a patient/health care provider partnership and action-taking. In line with Lorig’s studies, other recent studies attest the efficacy of SM in different chronic conditions for adult and young (e.g., Allegrante et al., 2019; Bobitt et al., 2019; Lee et al., 2018; Lozano et al., 2018; Moradi et al., 2019; Muscat et al., 2020; Popoviciu et al., 2022; Yi et al., 2018; Settineri et al., 2019) and in different psychological clinical conditions such as depression and anxiety (e. g., Cramm et al., 2021; Frisone, 2021; Houle et al., 2013; van Grieken et al., 2015; Zou et al., 2013).

Within academic context, recent studies are mainly focused on the psychopathological symptoms and the construction of psychological setting of support for students (e. g., Gómez, 2020; Ramlan et al., 2020; Sommantico et al., 2017; Sorrenti et al., 2019; Zafar & Ansari, 2020).

To date, only a few studies have attempted to adopt SM in the academic context with non-clinical sample in order to enable university students to implement the ability to manage and position themselves in a functional and active way with respect to their objectives within the context of their academic career. The studies that, in the formative field, have analyzed this key competence have mainly concentrated on school contexts and are aimed at clinical population targets with a particular psychological or physical disability, such as a behavioral disorder or intellectual deficit (e. g., Carr et al., 2014; Martella et al., 2003; Mechling, 2007; Mooney et al., 2005; Nelson et al., 1991), a physical handicap (e. g., McDougall, 1998) or neurodevelopmental disorders (e. g. Barry & Messer, 2003; Slattery et al., 2016). These interventions, in the school environment, are aimed at supporting and implementing the acquisition of SM skills and are

divided into 5 main trajectories: self-monitoring, self-evaluation, self-instruction, goal-setting and strategy instruction (Coyne et al., 2001; Zimmerman & Schunk, 2001).

Several studies (Brooks et al., 2003; Roberts et al., 2019; Rock, 2005) have shown how the development and promotion of SM skills are associated with positive impacts on academic engagement, i.e. on the product of the relationship between the students and the institution (Freda et al., 2021), which plays a central role in both academic success (Lei et al., 2018) and the prevention of drop-out (Esposito et al., 2021; Kifk, 2015; Kuh et al., 2008; Thomas, 2012; Zepke, 2019). However, these studies, on account of the fact that such interventions have targeted populations of students with exceptional conditions or with behavioral difficulties, have mainly focused on the context of the high school and in relation to students at risk or with a disability (Darus et al., 2017).

Faced with this polarization in the use and study of SM, either mainly in the school environment or centralized on the treatment and management of individuals with a specific physical or mental health impairment/disorders, we believe that in the context of university training the competence of SM positions itself as a strategic competence. It can be useful to the entire student population, being placed within the European framework of lifelong learning (Alieksieieva et al., 2021) comprising skills to be developed, learned and implemented during the university studies and at the moment of entry into the world of work. We believe that such training is important because it is at the basis of the construction and promotion of a positive psychological functioning aimed to an activation and implementation of personal skills and resources to construct well-being and integration in the relationship between the student and the academic context (Delle Fave, 2004; Seligman & Csikszentmihalyi, 2014).

Therefore, in the academic field, SM can be defined as the ability to work effectively towards significant goals and to adopt a flexible approach in the face of setbacks (Agolla & Ongori, 2009). It involves the ability to regulate one's emotions, thoughts and behaviors effectively in different situations. This includes managing stress, delaying gratification, motivating oneself and setting and working towards personal and academic goals. SM means being able to set realistic targets and to undertake to achieve them, and in the case that you might encounter any problems along the way, being able to recognize such difficulties and, by adopting a problem-solving approach, find flexible solutions to overcome them. This is possible through the development of clear, fact-based thinking, including the ability to separate personal interpretations and beliefs from facts, the ability to regulate emotions, the ability to make decisions, seeking out the correct information to support them and trusting one's own judgment, and the ability to regulate one's

own energy level and take care of one's own well-being. It is the alignment of goals, values and personal actions (Agola & Ongori, 2009; Dembo & Seli, 2004).

1.1. The current study

In light of these findings so far reported and in order to fill a gap in this research field, the aim of this paper is twofold. On the one hand, we intend to study, analyze and implement SM competences within the university context, through an innovative group training path, attempting to extend the use of this competence from supporting a condition of physical or mental fragility to its application within the perspective of health promotion and well-being aimed at all students. The objective is to enable them to implement their own resources for an effective, autonomous and flexible management of their relationship with the university context, first in relation to their own educational ambitions and then in terms of their transition into work. On the other hand, we aim to analyze the first cycles of the group self-management training conducted with university students, demonstrating the efficacy of the data in the relationship between pre- and post-training.

2. Materials and Methods

2.1 Participants and Context

Six cycles of the SInAPSi Academic Self-Management Training Group (SAM) were carried out at the SInAPSi University Center of the Federico II University of Naples between October 2020 and November 2021 in an online mode through the MTeams platform due to the Covid-19 pandemic (Nguyen-Feng et al., 2017).

The participation of the students was voluntary. The recruitment process started with the dissemination of information about the SM training on the website of the SInAPSi University Center and on its social media pages (Facebook and Instagram). Details of the starting dates of the next training courses were also sent to all the institutional email addresses of eligible students. Students who were interested sent an email to the service address, showing their membership. Participation was open to all students of the Federico II University of Naples, from every year of study and from every disciplinary sector.

The Covid-19 pandemic, on the one hand, has engendered among the students a greater desire to feel that the university is close to their needs and to undertake an exchange and communication with their peers to overcome feelings of social isolation. On the other hand, it has promoted an easier participation in university activities due to the online nature of the

communication, so enabling the students to avoid spending time in reaching the physical location of the university.

The research was approved by the Executive Committee of Sinapsi Centre of Federico II University, Naples.

The students participating in the groups signed an informed and so agreeing to the processing of their personal data.

Academic and socio-demographic information about the participants is summarized in Table 1.

Table 1. Socio-demographic characteristics

Training cycles	Number of participants	Mean Age (SD)	Status	Type of University	Subject area course
6	92 (F= 54)	24.7 (4.703)	In course	Bachelor Degree	STEM 73.9%
			62%	60.9%	
			Off-course	Master's Degree	Socio-humanistic
			38%	21.7%	18.5%
				Single-cycle	
				Degree	Medical 7.6%
				17.4%	

2.2 Procedures

The SInAPSi Academic Self-Management Training Group (SAM). An online group training path was designed and developed, centered on the acquisition and promotion of strategic SM skills, aimed at students on any degree course and in any year of study provided through the MTeams platform. Each path consisted of a total of 6 two-hour meetings, each including an opening and closing plenary. The SAM cycles began in October 2020, achieving a total of 6 completed cycles to date (November 2021). The meetings were conducted by two clinical psychologists, experienced in leading groups. The groups were composed of a maximum of 20 participants

each. At the end of the group course, a certificate of participation was issued. Each meeting focused on the discussion of the specific skills that compose the strategic competence of SM.

The central meetings each dealt with a specific skill, which was presented to the group of students through the use of *ad hoc* slides. Regarding each specific skill, individual strategies were presented to assist the students in its implementation. Each individual implementation strategy also included the presentation of an open question, which enabled the participants to connect the use of the strategies presented with their subjective university experience and to activate a comparison with the other students about their different life stories.

Table 2. SAM structure

	Meeting objectives	Toolkit to do
Meeting 1: Plenary meeting	knowledge of the group of students, organization of the setting and sharing of the aims of the training. Presentation of SM competence. Administration of questionnaires	
Meeting 2: Time Management Strategies	How do you manage your time? Prioritize. Be specific. Using time and environment. Establish a routine. Building a to do list: how to do it	draft of three types of to do list scheme (weekly, monthly and quarterly) to be used and experimented during the week to organize all life activities.
Meeting 3: Motivation to academic study	Wanting is power. Success brings success. Focus on the effort. Success breeds success. Transforming “having to do” into a “desire to do”. Constructive thoughts. Congratulate yourself	compilation of a form centered on the ability to identify one's own resources and potential in the relationship with the study and the university

		Compilation of a form centered
	Looking Inward	on the forecasting ability to take
	Proactive Strategies	stock and identify the possible
Meeting 4:	Expectations VS Goals	obstacles that may be encountered.
Achievement goals	Building B Plans	It is a form centered on the ability
Strategies	Constructive Thoughts	to identify one's own useful
	Self Assessment	behaviors to maintain and those to
		be modified and how.
	what is it and when is there a	brief summary to implement the
Meeting 5:	problem?	ability to identify which phase of
Problem-solving	Knowing how to focus.	management of a problematic
Strategies	Be creative.	situation you are in and which are
	Change perspective.	the next steps to be analyzed in
	Share and discuss	order to face it.
	balance of experience and degree of	
	satisfaction; sharing of acquired skills	
Meeting 6:	and relaunching towards the future.	
Closing Meeting	Issue of certificate of participation	
	and administration of questionnaires.	

After each meeting, an *ad hoc* “to do” toolkit was constructed and sent to the students in order to help them to consolidate the acquisition of the strategies discussed in the meeting and to undertake a subjective and experimental use of such strategies in their academic life, following the logic of learning by doing. The subsequent meeting was always opened by discussing the use made by students of the toolkit released in order to promote a comparison between the students' experiences in using the strategies and to consider any difficulties and questions which they may have encountered in their practical implementation.

Narrative and group: mediation tools. The mediation tools used in the SAM methodology were the group and the narrative exchange between peers, where the role of the psychologists was to create a facilitating environment in which to make the students feel welcomed and understood, through a process of reflection and recognition of emotions and experiences. The use of

circularity in the group offered the participants the opportunity to share and narrate their academic experience and, above all, to overcome feelings of isolation and loneliness.

Each group was essentially a homogeneous group with respect to the university experience, which is the characteristic shared by the participating students, an element that facilitated the creation of a positive climate and the sharing of experiences (Marinelli, 2004). However, the heterogeneity of the group inherent in the specificity of the quality of this experience (for example, the enrolment on different study courses) represented a value because it allowed different thoughts and comparisons to emerge, enabling the participants to observe the various experiences both in their similarities and differences. Each of the participants represented for the others a reflective mirror, presenting a similar or complementary image and providing a new perspective (Esposito et al., 2017). This allowed the promotion of an active, flexible and above all creative positioning towards the obstacles, difficulties and impasses that may be encountered in the university career through the acquisition of concrete coping strategies. In addition, the use of the “to do” toolkit allowed the participant to accompany the process of coping with a connection to and transformation of daily practices (Freda et al., 2016).

This is an accompaniment to the acquisition of new strategies that they all faced together because during such a journey they always adopted a binocular vision: "the old", linked to the past history, the common experiences, the adventures and misadventures shared in the course of time; and “the new”, linked both to the elements of reality and to the expectations regarding the future and the choices to be made (Freda & Esposito, 2020).

In this regard, the use of narrative sharing of academic experiences, positive or negative, performed a transformative function (Margherita et al., 2014; Martino et al., 2019a, 2019b, 2022). In particular, narrative and sharing the experiences in group dynamic performs a reflective function useful in facing change by building new versions of the experiences, thanks to different points of view at play, thus accessing the internalization of the new meanings connected to the use of new strategies (Esposito et al., 2021).

2.3 Measures

In order to evaluate the efficacy of the intervention, four self-report measures were administered at the beginning and at the end of the training.

The Academic Motivation Scale. In order to evaluate the academic motivation style of the students, the Academic Motivation Scale (AMS; Alivernini & Lucidi, 2008) was administered. It is one of the most frequently used measures of academic motivation. The scale is composed of 20 items

(on a 7-point Likert scale) organized into 5 dimensions, each measuring one of the regulation styles of academic motivation: *amotivation*, which refers to the absence of control in the enacted behavior and the desire to discontinue the engagement in a given situation; *external regulation*, which refers to behaviors guided by external requests, material rewards, or the avoidance of criticism and punishment; *introjected regulation*, which involves the feeling of duty or the avoidance of a sense of guilt but also the improvement of self-perception as the main driving force underlying a certain behavior; *identified regulation*, which implies a conscious and autonomous perception of the value related to the enacted behavior; and *intrinsic motivation*, which implies the involvement in an activity for the pleasure and satisfaction inherent in the activity, regardless of the consequences. In its Italian version, the AMS shows a good validity and reliability.

The SInAPSi Academic Engagement Scale. In order to measure the students' academic engagement, the SInAPSi Academic Engagement Scale (SAES; Freda et al., 2021) was administered. The SAES operationalizes an academic engagement (AE) model for university students based on six dimensions and the 29 items (on a 5-point Likert scale) are organized into 6 scales, corresponding to each of the six dimensions of the model: 1) the capability to persist, which refers to the student's perception of possessing the necessary resources and being able to undergo the university choice; 2) university value, which refers to the value each student ascribes to the university and the sense of belonging to the institution; 3) the university course value, which refers to the value each student ascribes to the university course they selected for their university choice; 4) relationships with peers; 5) relationships with professors; and 6) integration, referring to the extent to which university life and the relational network are perceived as being integrated and in connection. The SAES has a valid factor structure and shows a good convergent, discriminant, construct-related and criterion-related validity (Freda et al., 2021).

General Self-efficacy. In order to evaluate the students' self-efficacy, the General Self-Efficacy Scale (GSE; Pierro, 1997) was administered. This is a 10-item self-report questionnaire (on a 4-point Likert scale) which evaluates the general sense of perceived self-efficacy on a score ranging from 10 to 40 points.

3. Results

A T-test for paired samples was performed in order to evaluate the efficacy of the training and to identify differences between the pre-test phase administration and post-test phase results. All the results in relation to the T-test are presented in Table 3.

Table 3. T-test for paired samples of GSE, SAES and AMS

	PRE-TEST	POST-TEST	T	PVALUE
	MEAN	MEAN		
GSE	29.50	33.60	-6.198	<i>p</i> = .000*
SAES – Capability to Persist	3.77	3.88	-1.480	<i>p</i> = .144
SAES – University Value	3.90	4.00	-1.703	<i>p</i> = .093
SAES – University Course Value	3.74	3.80	-.764	<i>p</i> = .448
SAES – Relationship with Peers	3.21	3.32	-1.175	<i>p</i> = .244
SAES – Relationship with Professors	3.01	3.09	-.817	<i>p</i> = .417
SAES – Integration	2.93	3.17	-2.241	<i>p</i> = .028*
AMS – Intrinsic	23.39	23.60	-.733	<i>p</i> = .466
AMS – Identified	22.96	22.99	-.098	<i>p</i> = .922
AMS – Introjected	16.15	17.45	-2.633	<i>p</i> = .010*
AMS – External	7.32	7.72	-1.280	<i>p</i> = .204
AMS – Amotivation	6.01	6.63	-2.168	<i>p</i> = .033*

* Significant value with a two-tailed test

As shown in the table, we have found a statistically significant difference between the pre- and post-test phase with regard to General Self-Efficacy, the Integration dimension of SAES and the Introjected Regulation and Amotivation of AMS. Although not significant, all the SAES dimensions, the DCR index and the other motivation scales showed an increase.

4. Discussion

Data analysis showed a statistically significant difference between the pre- and post-test phase on the General Self-Efficacy scale. This result suggests that the SAM affected positively the students' perception of their own self-efficacy.

The data analysis also showed a statistically significant increase on the AE dimension of Integration between university and private life. This result suggests that the SAM provided the opportunity to acquire skills that were functional for the students in order to assign or recognize the role of university life in the wider domain of private life and the relational network. We could argue that this process is the root of an efficient balance between academic and non-academic activities, which in turn could affect the intention to persist and the perception of the capability to persist on the academic journey.

With regard to the other AE dimensions, coherently with previous studies with different target populations (Brooks et al., 2003; Roberts et al., 2019; Rock, 2005), although not a significant one. We could interpret these results in terms of a consideration that all the AE dimensions were already at a medium-high level in the pre-test phase, except for the dimension of Integration, which was, indeed, the only dimension that could demonstrate any real improvement. In fact, the data from the pre-test phase showed that the participants reported high levels on dimensions related to the value of both the university and their own academic project (University Value and Academic Project Value) and to the perception of the student's capability to persist in their own academic project (Capability to Persist). At a lower level, but still in the medium-high range, we found the students' scores on the dimensions Relationship with Peers and Relationship with Professors, with only the dimension of Integration below the score of 3. Concerning these results, we could hypothesize that the restrictions imposed in relation to the CoVID-19 pandemic and the anti-contagion measures of social distancing could have had an impact on the possibility to meet other students, share experiences and participate in relationships with peers and teachers. In this perspective, it is worth noting that developing and maintaining both supportive relationships with faculty and other university staff (Raposa et al., 2020) and interpersonal relationships with peers and friends (Demetriou et al., 2017) is important in university student academic success and development, and university attendance facilitates peer interactions and the development of relationships with colleagues (Lederer et al., 2021; Martínez Alemán, 2010); moreover, only attending university it is possible to interact with faculty and staff. During the first phases of CoVID-19 spreading, students could not go out and attend the institution and therefore the institution entered their homes, invading and conquering spaces that were previously private. Therefore, we could hypothesize that this state of facts could also, maybe most importantly, impact on the student's developmental task of balancing and integrating university and private life, considering the great effort required to face the psychological, social and subjective impact of the pandemic and to readjust to the new way

of attending university. Students could not go out and attend the institution and therefore the institution entered their homes, invading and conquering spaces that were previously private.

With regard to the AMS, we found both expected and unexpected results. If we expected that the most autonomous form of motivation, namely Intrinsic Regulation, would have increased, although not significantly, at the end of the training, we certainly did not expect that Amotivation would increase and with a statistically significant difference from the pre-test phase. We could argue that, although significantly increasing, Amotivation, and also External Motivation, presented very low scores, compared to the more autonomous forms of Intrinsic and Identified Motivation.

It is also noteworthy that a recent study (Lyndon et al., 2020) using Generalizability Theory demonstrated that the individual subscales of the AMS had a low temporal stability and generalizability across the sample populations and occasions and found important evidence that the AMS subscales were measuring motivational states rather than traits, namely dynamic aspects of motivation. This would suggest that individuals have a set of motivational resources, rather than being more motivated in one direction or another. Therefore, within different contexts, motivation can change, as external factors have an influence over the motivation levels measured by the separate AMS subscales. In the case of our sample, major social changes were taking place during the participation in the training and therefore we can hypothesize that the pandemic situation fostered doubts and uncertainties, also with respect to the academic project, and that maybe the SAM training offered a space for an exploration of this confusion. Nevertheless, it is important to highlight that, given their scores, these students did not have any motivational issues regarding their university studies.

These interpretations apply obviously also to the Introjected Motivation subscale, which also increased significantly. However, we could also reflect on the ambiguous “nature” of this form. If Intrinsic and Identified Motivation could be considered as more autonomous and Amotivation and External Motivation as less autonomous forms of academic motivation, it is difficult to apply the same dichotomous logic to Introjected Motivation. In fact, we could argue that this subscale refers to a form of motivation that deals with both external (the sense of duty and of guilt) and intrinsic (self-perception as a student) drives. In reference to the latter, we could hypothesize that the SAM training offered the possibility to focus on the role of the participants as students, to explore their own competences and resources and to acquire new skills, stimulating a process of identity role definition.

5. Conclusions

This study provided a modeling and efficacy evaluation of the SAM, understood as a psychological intervention, within clinical health psychology (Sirigatti & Casale, 2008). It is aimed at the promotion of well-being, within the relationship between the student and the academic context, working through the possibility of acquiring or fostering key skills in line with the requirements of the EU framework (2020). In our study, the SAM was a useful training opportunity for students without any sign of distress or any particular difficulty in the academic context. It is noteworthy that the students who decided to participate in the training had not presented any signs of uneasiness in their academic career. In fact, most participants were perfectly on course, although lagging slightly behind in terms of the acquisition of credits in relation to the European Credit Transfer and Accumulation System (ECTS). This aspect is very relevant and consistent with the objectives of the training, which is not aimed at treating psychological symptoms, but rather at promoting well-being and a functional relationship with the university.

As a conclusion of this study, the SAM proved to be effective in improving the students' general self-efficacy and a more adaptive integration of their university life within the private domain. We believe that the acquisition of these skills will support the students not only during their academic career, and the achievement of successful results, but also during their transition into the world of work.

6. Limitation and future directions

This study presents some limitations. The main limitation concerns whether our findings are causally related. Given the non-causal nature of our analyses, we are not able to discern which results were ascribable to the training and how far the results were influenced by the pandemic situation.

As this is not an experimental study, in our future research it will be expedient to constitute a control group and use more sophisticated statistical analyses to evaluate the training efficacy. Moreover, in this study we have not been able to determine whether the changes in self-efficacy and AE have impacted on the students' academic performance and whether such improvements have persisted over time or whether they were simply a temporary product of the group interactions. Therefore, our future studies will take into account analyses of subsequent follow-up administrations to observe if any changes are consistent and persistent over time.

Other limitations concern the small sample of this study. It is necessary to extend the sample in order to ensure that these results can be replicated. Finally, although the SAM training assumes the key role in the group in promoting psychological well-being and academic engagement, this study has not measured group variables (e.g., group climate) which may have influenced the positive outcomes. Our future studies will analyse variables, relationships and the identify predictors and moderators of any improvements in relation to academic performance.

Data Availability

The data that support the findings of this study are available on request from the corresponding author, [MLM]. The data are not publicly available due to their containing information that could compromise the privacy of research participants.

Conflict of Interest Statement

The authors declare that the research was conducted in the absence of any potential conflict of interest.

References

1. Agolla, J. E., & Ongori, H. (2009). An assessment of academic stress among undergraduate students: The case of University of Botswana. *Educ Res Rev*, 064-070. <http://hdl.handle.net/10311/837>
2. Aliksieieva, S., Yershova, L., Kravets, S., Lapshyna, O., & Odnoroh, H. (2021). Self-education and self-management to develop entrepreneurship competence in future professionals. SHS Web of Conferences 104. 1-7. <https://doi.org/10.1051/shsconf/202110403002>
3. Alivernini, F., & Lucidi, F. (2008). The Academic Motivation Scale (AMS): Factorial structure, invariance and validity in the Italian context. *Testing, Psychometrics, Methodology in Applied Psychology*, 15(4), 211-220.
4. Allegrante, J. P., Wells, M. T., & Peterson, J. C. (2019). Interventions to support behavioral self-management of chronic diseases. *Annual review of public health*, 1(40), 127-126. [10.1146/annurev-publhealth-040218-044008](https://doi.org/10.1146/annurev-publhealth-040218-044008)
5. Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84, 191-215. Doi: <https://doi.org/10.1037/0033-295X.84.2.191>
6. Barry, L. M., & Messer, J. J. (2003). A Practical Application of Self-Management for Students Diagnosed with Attention-Deficit/Hyperactivity Disorder. *Journal of Positive Behavior Interventions*, 5(4), 238-248. <https://doi.org/10.1177/10983007030050040701>
7. Bobitt, J., Aguayo, L., Payne, L., Jansen, T., & Schwingel, A. (2019). Geographic and social factors associated with chronic disease self-management program participation: going the “extra-mile” for disease prevention. *Preventing Chronic Disease*, 16, E25. <http://dx.doi.org/10.5888/pcd16.180385>
8. Brooks, A., Todd, A. W., Tofflemoyer, S., & Horner, R. H. (2003). Use of functional assessment and a self-management system to increase academic engagement and work completion. *Journal of Positive Behavior Interventions*, 5, 144-152. <https://doi.org/10.1177/10983007030050030301>
9. Carr, M. E., Moore, D. W., & Anderson, A. (2014). Self-management interventions on students with autism: A meta-analysis of single-subject research. *Exceptional Children*, 81, 28-44. <https://doi.org/10.1177/0014402914532235>
10. Coyne, M. D., Kame'enui, E. J., & Simmons, D. C. (2001). Prevention and intervention in beginning reading: Two complex systems. *Learning Disabilities Research & Practice*, 16(2), 62-73. <https://doi.org/10.1111/0938-8982.00008>
11. Cramm, J. M., Hartgerink, J. M., De Vreede, P. L., Bakker, T. J., Steyerberg, E. W., Mackenbach, J. P., & Nieboer, A. P. (2012). The relationship between older adults' self-management abilities, well-being and depression. *European Journal of Ageing*, 9(4), 353-360. <https://doi.org/10.1007/s10433-012-0237-5>
12. Darus, M. Y., Hazani, M. S. A., & Awang, N. (2017). Mobile Self-Management System for University Students using Mobile Application Development Lifecycle (MADLC). *Journal of Telecommunication, Electronic and Computer Engineering (JTEC)*, 9(3-4), 11-14.
13. Dembo, M. H., & Seli, H. P. (2004). Students' Resistance to Change in Learning Strategies Courses. *Journal of Developmental Education*, 27, 2-4.
14. Demetriou, C., Meece, J., Eaker-Rich, D., & Powell, C. (2017). The activities, roles, and relationships of successful first-generation college students. *Journal of College Student Development*, 58(1), 19-36. <https://doi.org/10.1353/csd.2017.0001>

15. Esposito, G., Karterud, S., & Freda, M. F. (2021). Mentalizing underachievement in group counseling: Analyzing the relationship between members' reflective functioning and counselors' interventions. *Psychological Services, 18*(1), 73-83. <https://doi.org/10.1037/ser0000350>
16. Freda, M. F., Raffaele, D. L. P., Esposito, G., Ragozini, G., & Testa, I. (2021). A new measure for the assessment of the university engagement: The SInAPSi academic engagement scale (SAES). *Current Psychology, 1*(17). <https://doi.org/10.1007/s12144-021-02189-2>
17. Freda, M. F., González-Monteaagudo, J., & Esposito, G. (Eds.). (2016). Working with underachieving students in higher education: Fostering inclusion through narration and reflexivity. Routledge.
18. Frisone, F. (2021). Why do we call it addiction? Epistemological reflections on the world of addiction. *Mediterranean Journal of Clinical Psychology, 9*(2). <https://doi.org/10.13129/2282-1619/mjcp-3075>
19. Gómez, A. S. (2020). Psychosocial factors and clinical predictors of suicide risk in college students. *Mediterranean Journal of Clinical Psychology, 8*(3). <https://doi.org/10.6092/2282-1619/mjcp-2602>
20. Houle, J., Gascon-Depatie, M., Bélanger-Dumontier, G., & Cardinal, C. (2013). Depression self-management support: a systematic review. *Patient education and counseling, 91*(3), 271-279. <https://doi.org/10.1016/j.pecc.2013.01.012>
21. Kift, S. (2015). A decade of transition pedagogy: A quantum leap in conceptualising the first-year experience. *HERDSA Review of Higher Education, 2*, 51–86. Retrieved from www.herdsa.org.au/herdsa-review-higher-education-vol-2/51-86
22. Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *The Journal of Higher Education, 79*(5), 540-563. <https://doi.org/10.1080/00221546.2008.11772116>
23. Lederer, A. M., Hoban, M. T., Lipson, S. K., Zhou, S., & Eisenberg, D. (2021). More than inconvenienced: The unique needs of US college students during the COVID-19 pandemic. *Health Education & Behavior, 48*(1), 14–19. <https://doi.org/10.1177/1090198120969372>
24. Lee, J. A., Choi, M., Lee, S. A., & Jiang, N. (2018). Effective behavioral intervention strategies using mobile health applications for chronic disease management: a systematic review. *BMC Medical Informatics and Decision Making, 18*(1), 1-18. <https://doi.org/10.1186/s12911-018-0591-0>
25. Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and academic achievement: A meta-analysis. *Social Behavior and Personality: an international journal, 46*(3), 517-528. <https://doi.org/10.2224/sbp.7054>
26. Lorig, K. R., Sobel, D. S., Ritter, P. L., Laurent, D., & Hobbs, M. (2001). Effect of a self-management program on patients with chronic disease. *Effective clinical practice: ECP, 4*, 256-262.
27. Lorig, K., & Holman, H. (2000, August). Self-management education: context, definition and outcomes. In *Chronic Disease Self-Management Conference, Sydney, Australia*.
28. Lorig, K., Ritter, P. L., Villa, F. J., & Armas, J. (2009). Community-based peer-led diabetes self-management. *The diabetes educator, 35*, 641-651. <https://doi.org/10.1177/0145721709335006>
29. Lozano, P., & Houtrow, A. (2018). Supporting self-management in children and adolescents with complex chronic conditions. *Pediatrics, 141*(Supplement_3), S233-S241. <https://doi.org/10.1542/peds.2017-1284H>

30. Lyndon, M. P., Medvedev, O. N., Chen, Y., & Henning, M. A. (2020). Investigating stable and dynamic aspects of student motivation using generalizability theory. *Australian Journal of Psychology*, 72(2), 199-210. <https://doi.org/10.1111/ajpy.12276>
31. Margherita, G., Martino, M. L., Recano, F. & Camera, F. (2014). Invented fairy tales in groups with onco-haematological children. *Child: Care, Health and Development*, 40(3), 426-434. 10.1111/cch.12076.
32. Marinelli S. (2004). Funzioni dell'omogeneità nel gruppo [Functions of omogeneity in group]. In Corbella S., Girelli R., Marinelli S. (a cura di) Gruppi omogenei. Borla, Roma.
33. Martella, R. C., Nelson, J. R., & Marchand-Martella, N. E. (2003). *Managing disruptive behaviors in the schools: A schoolwide, classroom, and individualized social learning approach*. Allyn and Bacon.
34. Martínez Alemán, A. M. M. (2010). College women's female friendships: A longitudinal view. *The Journal of Higher Education*, 81(5), 553–582. <https://doi.org/10.1080/00221546.2010.11779067>
35. Martino, M. L., De Luca Picione, R., Lemmo, D., Boursier, V., Freda, M. F. (2019a). Meaning-Making Trajectories of Resilience in Narratives of Adolescents with Multiple Sclerosis. *Mediterranean Journal of Clinical Psychology*, 7(2), 1-25. <https://doi.org/10.6092/2282-1619/2019.7.2049>
36. Martino, M. L., Gargiulo, A., Lemmo, D., Dolce, P., Barberio, D., Abate, V., Avino, F., Tortriello, R. (2019b). Longitudinal effect of emotional processing on psychological symptoms in women under 50 with breast cancer. *Health Psychology Open*, 6(1), 1-9. <https://doi.org/10.1177/20551029198445>
37. Martino, M. L., Lemmo, D., Gargiulo, A., Barberio, D., Abate, V., Avino, F., Freda, M. F. (2022). Changes of narrative meaning-making markers during the different phases of breast cancer treatment for women below 50 years old. *Health Psychology Report*, 10(1), 58-67. <https://doi.org/10.5114/hpr.2021.105363>
38. McDougall, D. (1998). Research on self-management techniques used by students with disabilities in general education settings: A descriptive review. *Remedial and Special Education*, 19(5), 310-320. <https://doi.org/10.1177/074193259801900507>
39. Mechling, L. C. (2007). Assistive technology as a self-management tool for prompting students with intellectual disabilities to initiate and complete daily tasks: A literature review. *Education and training in developmental disabilities*, 42(3), 252-269. <http://www.jstor.org/stable/23879621>.
40. Mooney, P., Ryan, J. B., Uhing, B. M., Reid, R., & Epstein, M. H. (2005). A review of self-management interventions targeting academic outcomes for students with emotional and behavioral disorders. *Journal of Behavioral Education*, 14, 203-221. <https://doi.org/10.1007/s10864-005-6298-1>
41. Moradi, M., Nasiri, M., Jahanshahi, M., & Hajiahmadi, M. (2019). The effects of a self-management program based on the 5 A's model on self-efficacy among older men with hypertension. *Nursing and Midwifery Studies*, 8(1), 21-27. <https://www.nmsjournal.com/text.asp?2019/8/1/21/247935>
42. Muscat, D. M., Song, W., Cvejic, E., Ting, J. H. C., Medlin, J., & Nutbeam, D. (2020). The impact of the chronic disease self-management program on health literacy: A pre-post study using a multi-dimensional health literacy instrument. *International Journal of Environmental Research and Public Health*, 17(1), 58. <https://doi.org/10.3390/ijerph17010058>

43. Nelson, J. R., Smith, D. J., Young, R. K., & Dodd, J. M. (1991). A review of self-management outcome research conducted with students who exhibit behavioral disorders. *Behavioral Disorders, 16*(3), 169-179. <https://doi.org/10.1177/019874299101600308>
44. Nguyen-Feng, V. N., Greer, C. S., & Frazier, P. (2017). Using online interventions to deliver college student mental health resources: Evidence from randomized clinical trials. *Psychological Services, 14*(4), 481-489. <https://doi.org/10.1037/ser0000154>
45. Pierro, A. (1997). Caratteristiche strutturali dalla scala di General Self-Efficacy [General Self-Efficacy scale structural characteristics]. *Bollettino di Psicologia Applicata, 221*, 29-38.
46. Popoviciu, M. S., Marin, V. N., Vesa, C. M., Stefan, S. D., Stoica, R. A., Serafinceanu, C., ... & Stoian, A. P. (2022). Correlations between diabetes mellitus self-care activities and glycaemic control in the adult population: a cross-sectional study. *Healthcare 10*(1), 174. <https://doi.org/10.3390/healthcare10010174>
47. Ramlan, H., Shafri, N. I., Wahab, S., Kamarudin, M. A., Rajikan, R., Wahab, N. A. A., & Damanhuri, H. A. (2020). Depression, Anxiety and Stress in Medical Students: An Early Observation Analysis. *Mediterranean Journal of Clinical Psychology, 8*(2). <https://doi.org/10.6092/2282-1619/mjcp-2516>
48. Raposa, E. B., Hagler, M., Liu, D., & Rhodes, J. E. (2020). Predictors of close faculty–student relationships and mentorship in higher education: Findings from the Gallup–Purdue Index. *Annals of the New York Academy of Sciences, 1483*(2021), 36–49. <https://doi.org/10.1111/nyas.14342>
49. Roberts, G. J., Mize, M., Reutebuch, C. K., Falcomata, T., Capin, P., & Steelman, B. L. (2019). Effects of a self-management with peer training intervention on academic engagement for high school students with autism spectrum disorder. *Journal of Behavioral Education, 28*(4), 456-478. <https://doi.org/10.1007/s10864-018-09317-2>
50. Rock, M. L. (2005). Use of strategic self-monitoring to enhance academic engagement, productivity, and accuracy of students with and without exceptionalities. *Journal of Positive Behavior Interventions, 7*, 3-17. <https://doi.org/10.1177/10983007050070010201>
51. Seligman, M. E., & Csikszentmihalyi, M. (2014). Positive psychology: An introduction. In *Flow and the foundations of positive psychology* (pp. 279-298). Springer, Dordrecht.
52. Settineri, S., Frisone, F., Merlo, E. M., Geraci, D., & Martino, G. (2019). Compliance, adherence, concordance, empowerment, and self-management: five words to manifest a relational maladjustment in diabetes. *Journal of Multidisciplinary Healthcare, 12*, 299. [10.2147/JMDH.S193752](https://doi.org/10.2147/JMDH.S193752)
53. Sirigatti, S., & Casale, S. (2008). Psicologia della salute e psicologia clinica: oppure psicologia clinica della salute [Health psychology and clinical psychology: or clinical and health psychology]. *Psicologia della Salute, 3*, 47-58. [10.3280/PDS2008-003005](https://doi.org/10.3280/PDS2008-003005)
54. Slattery, L., Crosland, K., & Iovannone, R. (2016). An Evaluation of a Self-Management Intervention to Increase On-Task Behavior with Individuals Diagnosed with Attention-Deficit/Hyperactivity Disorder. *Journal of Positive Behavior Interventions, 18*(3), 168–179. <https://doi.org/10.1177/1098300715588282>
55. Sommantico, M., De Rosa, B., & Parrello, S. (2017). Counselling University students: A psychoanalytic approach. *Mediterranean Journal of Clinical Psychology, 5*(1). <https://doi.org/10.6092/2282-1619/2017.5.1354>

56. Sorrenti, L., Spadaro, L., Mafodda, A. V., Scopelliti, G., Orecchio, S., & Filippello, P. (2019). The predicting role of school Learned helplessness in internalizing and externalizing problems. An exploratory study in students with Specific Learning Disorder. *Mediterranean Journal of Clinical Psychology*, 7(2).
<https://doi.org/10.6092/2282-1619/2019.7.2035>
57. Swain, N., Lennox Thompson, B., Gallagher, S., Paddison, J., & Mercer, S. (2020). Gratitude Enhanced Mindfulness (GEM): A pilot study of an internet-delivered programme for self-management of pain and disability in people with arthritis. *The Journal of Positive Psychology*, 15(3), 420-426.
<https://doi.org/10.1080/17439760.2019.1627397>
58. Thomas, L. (2012). *Building student engagement and belonging in higher education at a time of change: Final report from the what works? Student retention and success project*. Retrieved from:
https://www.heacademy.ac.uk/sites/default/files/resources/What_works_final_report.pdf
59. van Grieken, R. A., Kirkenier, A. C., Koeter, M. W., Nabitz, U. W., & Schene, A. H. (2015). Patients' perspective on self-management in the recovery from depression. *Health Expectations*, 18(5), 1339-1348. <https://doi.org/10.1111/hex.12112>
60. Wright, C. C., Barlow, J. H., Turner, A. P., & Bancroft, G. V. (2003). Self-management training for people with chronic disease: An exploratory study. *British journal of health psychology*, 8(4), 465-476. Doi: <https://doi.org/10.1348/135910703770238310>
61. Yi, J. Y., Kim, Y., Cho, Y. M., & Kim, H. (2018). Self-management of chronic conditions using mHealth interventions in Korea: a systematic review. *Healthcare Informatics Research*, 24(3), 187-197.
<https://doi.org/10.4258/hir.2018.24.3.187>
62. Zafar, M., & Ansari, K. (2020). Sleep Disorders Among Undergraduate Health Students in Bristol, United Kingdom. *Mediterranean Journal of Clinical Psychology*, 8(3). <https://doi.org/10.6092/2282-1619/mjcp-2494>
63. Zepke, N. (2019). Student engagement research 2010-2018: continuity and emergence. *Advance*.
<https://doi.org/10.31124/advance.7871984.v1>
64. Zimmerman, B. J., & Schunk, D. H. (Eds.). (2001). *Self-regulated learning and academic achievement: Theoretical perspectives*. Routledge. UK.
65. Zou, H., Li, Z., Nolan, M. T., Arthur, D., Wang, H., & Hu, L. (2013). Self-management education interventions for persons with schizophrenia: A meta-analysis. *International Journal of Mental Health Nursing*, 22(3), 256-271. Doi: <https://doi.org/10.1111/j.1447-0349.2012.00863.x>



©2022 by the Author(s); licensee Mediterranean Journal of Clinical Psychology, Messina, Italy. This article is an open access article, licensed under a Creative Commons Attribution 4.0 Unported License. Mediterranean Journal of Clinical Psychology, Vol. 10, No. 2 (2022). International License (<https://creativecommons.org/licenses/by/4.0/>).
DOI: 10.13129/2282-1619/mjcp-3416