

Mytern: An Innovative Approach to Increase Students' Achievement, Sense of Wellbeing and Levels of Resilience

Jane Foster, William Allen, Florin Oprescu
Faculty of Science, Health, Education and Engineering
University of the Sunshine Coast

Margaret McAllister
Professor of Nursing
Deputy Dean Research
Central Queensland University (Noosa Campus)

Abstract

Many university students, particularly first year, do experience feelings of stress and social isolation, which negatively impact on their physical, mental and academic wellbeing. When it all becomes too overwhelming, some students perceive that their only solution is to drop out of university, or worse. This paper reports on a study at a regional Australian university using mixed methods to investigate the impact of an emotional fitness intervention (Mytern) on the emotional health and resilience of students in a compulsory first year course. The study adopted a salutogenic perspective to address the everyday stressors experienced by first year students; it explores factors that create health rather than concentrating on the limitations and disease that emerge as a result of these stressors. Results indicated that this supportive intervention developed a feeling of connection and a sense of control within a large number of students; enabling them to feel stronger mentally and physically; perform better academically; encouraging them to continue their study; despite continually being confronted with everyday stressors. Equipping students with a skill to reframe the daily stressors of university and life revealed increased wellbeing and retention rates, with implications to decrease the number of students presenting to an already overburdened student counselling service.

College and university campuses are struggling with limited resources to address increasing student mental health needs (Conley, Travers, & Bryant, 2013). Counselling services, which once met the developmental and informational needs of the students, have increasingly had to adapt to cater for the more severe psychological problems being presented. National and international studies have documented high levels of depression, anxiety and stress amongst first year university students (Eisenberg, Gollust, Golberstein, & Hefner, 2007; Price, McLeod, Gleich, & Hand, 2006; Wong, Cheung, Chan, Ma, & Tang, 2006). This is a situation which is only exacerbated/complicated by those students who choose not to seek help (Wynaden, Wichmann, & Murray, 2013).

There is now a large body of research advocating the need to incorporate resilience within educational curriculum (Miller, Nickerson, & Jimerson, 2009). Thus, a move towards addressing the mental health problems within university students, whilst also reducing numbers presenting to the student counsellors, may be achieved through embedding resilience interventions within the first year university experience (Stallman, 2011; Stallman & Shochet, 2009; Vivekananda, Telley, & Trethowan, 2011). This paper reports on the effects of the *Mytern*TM intervention on first year university students at one Australian university. The study documented changes in students' psychological wellbeing, life satisfaction, resilience and psychological distress levels. The results from this study indicate the positive influences that an intervention such as *Mytern*TM, has had on one cohort of first year students; these include keeping them at university, and even keeping them alive.

Kitzrow (2003) argued that both universities and colleges were dealing with enormous challenges that had been created as a result of the changing mental health needs of students. Since then, the challenges have increased (Conley, et al., 2013). Yet the changing mental health needs of students

only represent part of the problem. Past research indicates “that between 45% and 65% of university students experiencing mental health problems do not access professional help (Ryan, Shochet, & Stallman, 2010, p. 74). A recent study of how university students manage problematic symptoms, behaviours or an emerging or diagnosed mental disorder whilst studying (Wynaden, et al., 2013) found that the stigma of having a mental health problem remained a major factor that kept students from seeking help. The study revealed that reasons why students failed to seek help also included:

- 41.3% were unsure “whether their problems were serious enough to warrant consulting a health professional or even whether they had problems for which it was necessary to consult someone” (p.855);
- 18% had not “sought the assistance of a health professional because they felt they were able to deal with their problems on their own”(p. 856);
- 25.3% “had not sought help because they were afraid, anxious, embarrassed or ashamed to do so (p.856);
- Students also cited lack of time and cost of the treatment as barriers

The students experiencing the more serious problems such as depression and suicide are less likely to seek help, despite the fact that universities offer free health and counseling services. The increasing number of students avoiding seeking help emphasises the need to equip them with proactive strategies early on in their university life (the first year), in order to help prevent the escalating symptoms of stress. Studies have found that students are often more likely to seek informal help (Ryan, et al., 2010), indicating a need for providing health promotion strategies that are available for students to access in a more informal manner. If students were able to recognise their increasing levels of stress and were equipped with strategies to avoid, manage or reframe it, then the number of students presenting with moderate to severe mental health problems may decrease.

Developing resilience

Jorm et al., (1997) stressed the need for raising the mental health literacy in the general population so that early symptoms could be recognised and appropriate action taken, with emphasis on individuals learning to self-manage their own mental health. The need for preventative programs was also identified at the National Summit on the Mental Health of Tertiary Students (Norton & Brett, 2011), where it was recommended that resilience training be embedded in course design, as part of building mental health capacity in a proactive way. In the context of first year university students, the skill of resilience could be both learned and developed (McAllister & Lowe, 2011) enabling the students to sustain motivation and focus when faced with the challenges of transition and emerging adulthood (Stallman, 2011). It is resilience building that is at the core of the *Mytern* intervention.

Psychological principles at the foundation of *Mytern*: positive psychology, positive emotions and mindfulness

The resilience-building intervention *Mytern* was created as a preventative program. The psychological principles behind positive psychology (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009), positive emotions (B. L. Fredrickson, 2013) and mindfulness (Vago & Silbersweig, 2012), inform the intervention of *Mytern* in profound ways. The salutogenic perspective of positive psychology recommends the promotion of mental health interventions as a buffer for both mental and physical illness (B.L. Fredrickson & Losada, 2005; Seligman, 2011). From a higher education perspective, the teaching of positive psychology principles can be applied as ‘an antidote to depression, as a vehicle for increasing life satisfaction, and as an aid to better learning and more creative thinking’ (Seligman, et al., 2009, p. 295). Generating positive emotions, as part of the positive psychology teachings, has the ability to enhance psychological wellbeing and functioning,

and is associated with lowering levels of mental health problems (Bonanno, Westphal, & Mancini, 2011; Folkman & Moskowitz, 2000; B. L. Fredrickson, 1998, 2001; Lyubomirsky & Layous, 2013). Therefore, it is appropriate to introduce an intervention which promotes the generation of positive emotions into tertiary institutions where students are experiencing increased psychological distress (Stallman, 2012). The principle of mindfulness is what helps focus the student to be able to generate these positive emotions.

Description of the *Mytern* intervention

The *Mytern* intervention used in the study, was positioned in the area of health promotion and was proactive rather than reactive. Health promotion focuses on people gaining control over their health determinants, thereby improving their health in order to be able to lead an active and productive life (B Lindström, Eriksson, & Wikstrom, 2011). Importantly, the study was built around a salutogenic framework, an approach that focuses on factors that can create health and wellbeing in populations. The aim was not to seek ways to eliminate stressors from the participants' lives, but to help them strengthen and create health whilst still being under these everyday stressors. As a result, the intervention under study focused on the creation, enhancement and improvement of emotional resilience and well-being within first year tertiary students (B Lindström & Eriksson, 2006).

Mytern is an acronym that stands for Take Emotional Responsibility Now. As inferred by the name, the intervention required that students take responsibility for their emotions and thoughts. The major aim of the intervention was to provide a resource which would help alleviate and transform the everyday stressors experienced by first year university students. *Mytern* was originally created in response to the increasing prevalence of mental health problems within secondary schools. As an emotional fitness and resilience building skill, *Mytern* was designed to assist people in changing emotional habits through building resources and learning to self-generate positive emotions despite prevalent circumstances. The intervention aimed not to eradicate stressors, but to educate students through the use of metaphor, that they are in control of their emotional state. Another aim was to introduce a strategy to transform negative emotions; with the understanding that all emotions have their benefits (ie, that the positive roads build health whereas the less positive roads build resilience). The intervention emphasised that if students continued along resilient roads for too long, their health would diminish/deteriorate. Coming from a salutogenic perspective, *Mytern* also aimed to educate the students to be able to transform every day stressors into experiences that would help create health from within.

The study implementation

In light of the rising prevalence of mental health problems in first year university students; the overloaded students counselling services and the high numbers of students who choose not to seek help; this study was conceived. It evaluated the impact of a time and cost effective intervention (*MyTern*) which was embedded into a first year compulsory course in an Australian regional university, and delivered via a brief movie on DVD, a mini manual and a daily SMS.

Participants

Participants for the study came from two compulsory first year courses: COR109 Communication and Thought (approximately 600 students) and COR110 Innovation, Creativity and Entrepreneurship (approximately 700 students). These courses were chosen as they attracted students from each faculty and comprised a high percentage of first year students (over 80%).

Method: the implementation of *Mytern*

By adopting a salutogenic perspective and employing a mixed method approach, the study gathered data from surveys of wellbeing, semi-structured interviews and SMS feedback.

During the first tutorial of semester 2, students from a compulsory first year course (COR109 Communication and Thought) were introduced via a 4 minute DVD to the intervention Mytern. They were each offered a copy of the Mini Mytern Manual which outlined the skill and also gave examples of how to apply it. They were also given the opportunity to elect to receive the daily Mytern SMS service. (See Table 1)

Table 1: Mytern: Intervention timetable

Week	Mytern Component
2	Tutorial: DVD (4min), Mini Mytern Manual, opportunity to receive Mytern SMS by texting 'Mytern' to the mobile number given in the DVD and in the booklet
2-10	Mytern SMS: Mon-Fri available for those students who elected to receive them. This service can be ceased by replying 'stop' to the Mytern text.

Quantitative method: Participants were surveyed both pre and post intervention; with the questionnaires being given during tutorial and lecture times. A paired t-test was carried out to see if the hypothesis was supported (i.e. if the intervention had created significant change within IA and ISMS groups) and whether the difference was sampling error or due to the influence of the intervention. A one-way ANOVA was used to compare the means of the three groups and detect differences.

Past research in this area identified the different types of data that had been gathered and the most reliable instruments that had been used (Price, et al., 2006; Stallman, 2010; Vivekananda, et al., 2011; Wong, et al., 2006). Four questionnaires were selected and used: FS (psychological wellbeing), SWLS (life satisfaction), CD-RISC (resilience) and K-10 (distress levels). The scoring and efficacy of each questionnaire was taken into consideration before adopting them for use in the study. Utilising questionnaires that measure subjective well-being such as the ones adopted in the study has been shown to be an important area of research which can be instrumental in helping to improve the lives of individuals (Bendayan, Blanca, Fernandez-Baena, Escobar, & Trianes, 2013). Measuring subjective wellbeing is also in accordance with the salutogenic perspective of what makes people healthy in relation to their own values (Hultell & Petter Gustavsson, 2008).

Qualitative method: Semi-structured interviews were conducted immediately after the intervention and six months later; the aim being to listen to the voices of individual participants, recording their personal reactions to the intervention. This included discerning any factors that may have influenced student's psychological wellbeing, satisfaction with life, resilience and distress levels, as well why change may have occurred as a result of the intervention. A thematic approach was adopted for the analysis.

What have we learned? Findings/results

Quantitative data: Out of a potential 700 students in the control group (COR110), those who completed the questionnaires numbered 120 pre-test; with 54 completing both pre and post-test. The completion rate for the intervention group (COR109) was equally low. Out of a cohort of 600 students, 250 completed the pre-test; with only 53 completing both the pre and post tests. As the primary aim of the study was to measure change over time, only the participants who completed both the pre and post-tests (n= 107) were included in the analysis.

The quantitative results were divided into three different groups, as there were three separate influences/effects. The first group represented the control group, who received no intervention and were from the COR110 course (C). The second and third groups formed the experimental group. The second group consisted of students who had attended the tutorial, seen the DVD and received the booklet in COR109, but had not signed up for the SMS (IA). The third group were the

participants who had attended the tutorial, seen the DVD and received the booklet in COR109, and also elected to receive the daily Mytern SMS (ISMS). These will be referred to as

1. C=Control
2. IA= Intervention consisting of DVD and booklet)
3. ISMS=Intervention consisting of DVD, booklet, and daily Mytern SMS

Table: 1.1

Control group		Experimental group	
No intervention C	Intervention (DVD, booklet) IA	Intervention (DVD, booklet, SMS) ISMS	

The research tested the hypotheses that:

1. the students who received the *Mytern* intervention would have higher levels of psychological wellbeing, satisfaction with life, resilience and
2. the students who received the *Mytern* intervention would have lower levels of psychological distress than the control group.

Although the control group C did experienced some change in the four scales, it was not seen to be significant (See Table 2). The IA group only experienced significant change in one scale which was in the life satisfaction (SWLS) score (1.59 ± 3.41 ; $p=.010$). However, the ISMS group experienced significant change in all four scores: FS (5.74 ± 5.86 ; $p=.000$); SWLS (5.53 ± 5.16 ; $p=.000$); K-10 (-6.47 ± 7.18 ; $p=.001$); CD-RISC (3.84 ± 3.77 ; $p=.000$).

Table 2: Differences experienced between pre and post scores

T1 & T2 differences	Control Mean/SD/ <i>p</i> -value ^a	Intervention Mean/SD/ <i>p</i> -value ^a	SMS Mean/SD/ <i>p</i> -value ^a	<i>p</i> -value between Group
FS difference	0.64 ± 4.44 $p=.354^a$	1.31 ± 4.34 $p=.115^a$	5.74 ± 5.86 $p=.000^{*a}$.001 ^b .002 ^c
SWLS difference	0.38 ± 4.67 $p=.600^a$	1.59 ± 3.41 $p=.010^{*a}$	5.53 ± 5.16 $p=.000^{*a}$.000 ^b .001 ^c
K-10 difference	-1.36 ± 5.39 $p=.111^a$	-1.07 ± 4.79 $p=.240^a$	-6.47 ± 7.18 $p=.001^{*a}$.002 ^b
CD-RISC difference	0.86 ± 4.54 $p=.228^a$	1.21 ± 3.81 $p=.099^a$	3.84 ± 3.77 $p=.000^{*a}$.033 ^b .026 ^c

*significant at $p < .05$ ^a differences within group (t-test)^b differences between groups (one-way ANOVA);

^c Brown-Forsythe T1=pre test; T2= post test FS- Flourishing, K-10 Distress, SWLS Life satisfaction, CD-RISC Resilience

These salutogenic changes to the ISMS group may have been influenced by the limited response rate; discrepancies between the size of the groups; and the fact that the ISMS group began with the lowest scores, placing them in a position to experience the greatest change. However, through adopting a mixed-methodology, these results did not stand alone; the qualitative results also needed to be taken into consideration.

Qualitative data: Out of the 238 students who attended the first tutorial (COR109 intervention group), nearly 70 % elected to receive the daily SMS which was designed to reinforced the resilience building skill of Mytern. Participants' ages ranged from 17-61 (F = 60% and M = 40%)

with over 85% of the participants being from the first year cohort. In week 12, participants who had volunteered to participate in an interview on the original consent form were invited to organise an interview time. Ten students agreed to be interviewed, which was considered a representative sample of the whole group.

Participants' ages ranged from 18 - 61 consisting of three eighteen year olds, with the others being 19, 20, 28, 32, 47, and 48 respectively. (See Figure 1). Eight of the ten were first in family, with only one international student speaking a language other than English. The three male and seven female students were all enrolled in a compulsory first year course.

Friend, supporter, motivator

When asked in what way they felt that Mytern had had such a positive impact on their lives, the majority said that receiving the texts was like having a friend, a supportive influence, who was objective and always there for them. All except one commented that it didn't matter that the sender was anonymous. Quotes such as those from Rory and Sam are reflective of what all the participants felt about the friendship and support that developed between the anonymous SMS and the student.

There's someone else out there that isn't here with me right now, who cares, doesn't even know me, but still - that's how Mytern can make you feel, so that's good. It makes you feel someone's out there caring. (Rory)

You just know that someone's on your side and you feel like when you get the text it feels like you can relate. Just to know that somebody's on your side every day. Just to remind you, give you a bit of confidence. Make you feel a little bit of hope, a bit of happiness, getting that text and seeing and reminding you that you can change your life. (Sam)

The motivational impact of Mytern also emerged from the analysis. Students spoke about Mytern motivating them to stop and change the way they were thinking and feeling; to keep them working; to reinforce that they can do this; and that they can take control of their life. Three recurring words in the interviews were 'control', 'power' and 'motivation'. Quotes from Charlie and Phoenix (an international student) sum up the common sentiments expressed by the participants.

It is our only power...and it's wonderful. It's a lovely analogy, that steering wheel thing I think because you think about it driving around in your car and you think I have got power. Who else has got power over me except me really? Nobody can tell you really what to do, or what to feel. That's brings you back to the point, to you yourself, into your body, I'm here now and I've got to get hold of that steering wheel again. (Charlie)

The high retention rate of 82% achieved by the SMS service may reflect the Mytern SMS's positive influence, although some of those who decided to stop the texts did it from a salutogenic perspective; as the daily SMS had achieved what it had set out to do (the SMS was set up to scaffold the learning of the skill). An example of this scaffolding is reflected in one student's response:

Unsubscribe...Thank you for making my day, just when I needed it. My life is back on track, but your kind words have been helping when things have looked dark. While I no longer need your words, others do. I am passing on your kind spirit in my own ways, and practicing the skill every day. So thank you. Goodbye. (S113)

Results from both the questionnaires and semi-structured interviews indicated that the intervention Mytern (i.e. when exposed to all the Mytern components- DVD, mini manual and SMS) had a positive impact on the participants. It was in the merging of these results that these effects were realised.

Discussion

From a quantitative perspective, the hypotheses predicted positive change in each of the scales (psychological wellbeing, life satisfaction, resilience and levels of psychological distress) for the participants in the IA and ISMS groups, who each received aspects of the intervention. However, it was the ISMS group who confirmed the alternative hypothesis. As both groups had been exposed to the initial DVD and *Mytern* mini-manual, the only difference between the groups as far as the intervention was concerned, was also the receiving the daily *Mytern* SMS. Results between C and IA were similar, indicating that the DVD and mini-manual alone were not sufficient to create a significant impact on the scores of the IA group. Therefore, receiving the daily *Mytern* SMS as well as the DVD and mini-manual may have been what created the significant change experienced in the ISMS scores.

With the quantitative data suggesting that the positive differences to the ISMS scores may have been a result of the inclusion of the SMS component of the intervention, the qualitative results were investigated to try and ascertain why the students had experienced these changes. Here the significant changes experienced by the ISMS group in all four scales were confirmed. All the participants interviewed agreed that *Mytern* had had a major impact on their lives. Although the positive changes to those who received the complete intervention (i.e. DVD, mini manual and SMS) were predicted, the main reason for these changes was not.

The most profound finding and the major theme that emerged from the thematic analysis was the students' personal connection with the SMS. It was this connection which motivated the students to want to keep receiving the daily SMS in order to facilitate the positive changes they experienced to their levels of wellbeing. As stated before, this was not an outcome that was expected. Each one of the students referred to the SMS as being a friend; someone who cared; somebody out there who was watching out for them.

Practical implications

The rising prevalence of mental health problems within tertiary students, coupled with the increased demands that this places on student counselling services, indicates the need for interventions such as *Mytern* to be embedded within a first year tertiary course. Not only did the results show that *Mytern* was able to improve the psychological wellbeing, life satisfaction, resilience and levels of psychological distress of the students, they also indicated that the students who need a service such as *Mytern* elect to receive it. Having the skill within the course would also educate academic staff, equipping them with a skill to help support their students (Wynaden, et al., 2013).

Universities are in an excellent position to become more involved in the prevention of mental disorders and the promotion of wellbeing (Lally, Conghaile, Quigley, Bainbridge, & McDonald, 2013; Price, et al., 2006; Stallman, 2008). Through implementing a universal intervention such as *Mytern* (one which targets the entire first year population rather than just focussing on individuals who may be at risk), any stigma that may be associated with individual participants can be minimised (Lally, et al., 2013; Reavley & Jorm, 2010). Managing personal mental health issues begins with awareness, therefore a universal intervention introduced to all first year students also has the advantage of giving those at risk strategies to recognise and handle their own mental health issues, assisting them to minimise and manage them more effectively. (Andrews & Chong, 2011; Geisner, Neighbors, & Larimer, 2006).

Universal interventions also have the advantage of covering more than one issue or problem at a time, as was found with *Mytern*. Through adopting a salutogenic perspective, the skill helped students (whilst still under the influence of daily stressors) perform better academically; improve their relationships; stay at university; and even save lives. It is therefore important to implement universal interventions that cater for diverse student populations (Buchanan, 2012).

The major health constructs which were incorporated into the intervention Mytern were resilience, positive emotions and mindfulness. Resilience can be viewed as an asset-based approach that can support tertiary students' mental health needs (Hartley, 2012). Resilience is open to development (Bonanno, et al., 2011; McAllister & Lowe, 2011); can be enhanced by interventions (Connor & Davidson, 2003; McAllister & McKinnon, 2009) and can be learnt by anyone (McAllister & McKinnon, 2009; Newman, 2005). Vulnerability and adversity were common themes within the literature surrounding resilience, of which both may be encountered by a student in their first year of university. It was through the teaching of the Mytern skill, which showed how to transform daily stressors, that students' level of resilience was increased, helping them manage their vulnerability and adversity, reflecting the salutogenic concept of creating health through daily stressors.

Learning to cultivate positive emotions can be seen as a protective factor, as positive emotions not only signal flourishing, or optimal well-being, but produce it- both in the present moment and in the long term. They are worth cultivating, 'not just as end states in themselves but also as a means to achieving psychological growth and improved well-being over time' (Fredrickson, 2001, p. 218). From a salutogenic perspective, enhancing the protective factors is more effective than reducing the risk factors to improve resilience (Lee et al., 2013).

The daily SMS acted as a prompt to help students cultivate positive emotions, building a protective factor against daily stressors while creating improved wellbeing. As generating positive emotions has the ability to enhance psychological wellbeing and functioning, and is associated with lowering levels of mental health problems, it seems to be an important ingredient to be added to a tertiary intervention (Bonanno & Keltner, 1997; Folkman & Moskowitz, 2000; Fredrickson, 1998, 2001; Lyubomirsky et al., 2013).

Mindfulness was also incorporated into the intervention, but not in the usual way. The major difference with the mindfulness within Mytern was that it was practiced momentarily, via the SMS, rather than being practiced in a class situation for an extended period of time. This form of mindfulness enabled the students to become aware of their thoughts and emotions and not judge them, helping to transform psychological distress into psychological wellbeing (Keng, Smoski, & Robins, 2011).

These three constructs (resilience, positive emotions and mindfulness) combined to form a powerful intervention that was able to positively impact students' psychological wellbeing, life satisfaction; resilience and distress levels. This is just one example of how multiple constructs could be combined to form an intervention that may be suitable for tertiary students.

In conclusion, a major fact to consider is that many interventions are developed, implemented and evaluated by either student counsellors (Bretag, Hayes, & Rohde, 2009) or psychologists (Hasel, Abdolhoseini, & Ganji, 2011; Stallman, 2011). This highlights a need for universal interventions that can be implemented by those who are not specialists, such as the one in this study which was implemented by tutors. This can foster uptake of innovative health promotion within universities; health promotion driven by student support services; health promotion that could help address the stigma associated with mental health problems; and health promotion that could assist in reducing the strain already felt by university student counselling services (Lally, et al., 2013; Stallman, 2012).

References

- Andrews, A., & Chong, J. L. Y. (2011). Exploring the wellbeing of students studying at an Australian university. *Journal of the Australian and New Zealand Student Services Association* 37, 9-38.
- Bendayan, R., Blanca, M. J., Fernandez-Baena, J. F., Escobar, M., & Trianes, M. V. (2013). New empirical evidence on the validity of the satisfaction with life scale in early adolescents. *European Journal of Psychological Assessment*, 29(1), 36-43. doi: 10.1027/1015-5759/a000118

- Bonanno, G. A., Westphal, M., & Mancini, A. D. (2011). Resilience to loss and potential trauma. *Annual Review of Clinical Psychology*, 7, 511-535. doi: 10.1146/annurev-clinpsy-032210-104526
- Bretag, L., Hayes, A., & Rohde, A. (2009). How are you feeling today? : a brief intervention to assist university students to manage their mood. *JANZSSA*, 33, 43-55.
- Buchanan, J. L. (2012). Prevention of depression in the college student population: a review of the literature. *Archives of Psychiatric Nursing*, 26(1), 21-42. doi: 10.1016/j.apnu.2011.03.003
- Conley, C. S., Travers, L. V., & Bryant, F. B. (2013). Promoting psychosocial adjustment and stress management in first-year college students: The benefits of engagement in a psychosocial wellness seminar. *Journal of American College Health*, 61(2), 75-86.
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new Resilience scale: The Connor-Davidson Resilience scale (CD-RISC). *Depression and Anxiety*, 18(2), 76-82. doi: 10.1002/da.10113
- Eisenberg, D., Gollust, S. E., Golberstein, E., & Hefner, J. L. (2007). Prevalence and correlates of depression, anxiety, and suicidality among university Students. *American Journal of Orthopsychiatry*, 77(4), 534-542. doi: 10.1037/0002-9432.77.4.534
- Folkman, S., & Moskowitz, J. (2000). Positive affect and the other side of coping. *American Psychologist*, 55, 647-654.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of general psychology: Journal of Division 1, of the American Psychological Association*, 2(3), 300-319.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218-226. doi: 10.1037//0003-066x.56.3.218
- Fredrickson, B. L. (2013). *Positive emotions broaden and build*. 47 (pp. 1-53).
- Fredrickson, B. L., & Losada, M. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist*, 60(7), 678-686.
- Geisner, I. M., Neighbors, C., & Larimer, M. E. (2006). A randomized clinical trial of a brief, mailed intervention for symptoms of depression. *Journal of Consulting and Clinical Psychology*, 74(2), 393-399. doi: 10.1037/0022-006x.74.2.393
- Hartley, M. T. (2012). Assessing and promoting resilience: An additional tool to address the increasing number of college students with psychological problems. *Journal of College Counseling*, 15(1), 37-51.
- Hasel, K. M., Abdolhoseini, A., & Ganji, P. (2011). Hardiness training and perceived stress among college students. *Procedia - Social and Behavioural Sciences* (30), 1354-1358.
- Hultell, D., & Petter Gustavsson, J. (2008). A psychometric evaluation of the Satisfaction with Life Scale in a Swedish nationwide sample of university students. *Personality and Individual Differences*, 44(5), 1070-1079. doi: 10.1016/j.paid.2007.10.030
- Jorm, A. F., Ailsa, K., Jacomb, P., Christensen, H., Rogers, B., & Pollitt, P. (1997). "Mental health literacy": a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *The Medical Journal of Australia*, 166, 182-186.
- Keng, S. L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review*, 31(6), 1041-1056.
- Kitzrow, M. A. (2003). The mental health needs of today's college students: challenges and recommendations. *NASPA Journal*, 41(1).
- Lally, J., Conghaile, A. O., Quigley, S., Bainbridge, E., & McDonald, C. (2013). Stigma of mental illness and help-seeking intention in university students. *Psychiatrist*, 37(8), 253-260.
- Lee, J. H., Nam, S. K., Kim, A. R., Kim, B., Lee, M. Y., & Lee, S. M. (2013). Resilience: A meta-analytic approach. *Journal of Counseling and Development*, 91(3), 269-279.
- Lindström, B., & Eriksson, M. (2006). Contextualizing salutogenesis and Antonovsky in public health and development. *Health Promotion International*, 21(3), 238-244.
- Lindström, B., Eriksson, M., & Wikstrom, P. (2011). How to construct a salutogenic framework for adolescent health. Folkhalsan Research Center, Finland.
- Lyubomirsky, S., & Layous, K. (2013). How do simple positive activities increase well-being? *Current Directions in Psychological Science*, 22(1), 57-62.

- McAllister, M., & Lowe, B. (2011). Preparing for practice: becoming resilient. In M. McAllister & B. Lowe (Eds.), *The Resilient Nurse*. New York, NY: Springer.
- McAllister, M., & McKinnon, J. (2009). The importance of teaching and learning resilience in the health disciplines: A critical review of the literature. *Nurse Education Today*, 29(4), 371-379. doi: 10.1016/j.nedt.2008.10.011
- Miller, D., Nickerson, A., & Jimerson, S. (2009). Positive psychology and school-based interventions. In R. Gilman, S. Huebner & M. Furlong (Eds.), *Handbook of Positive Psychology in schools*. New York, NY: Routledge.
- Newman, R. (2005). APA's Resilience Initiative. *Professional Psychology; Research and Practice*, 36(3), 227-229.
- Norton, J., & Brett, M. (2011). *Healthy students, healthy institutions*. Paper presented at the National Summit on the Mental Health of Tertiary Students, Melbourne.
- Price, E. L., McLeod, P. J., Gleich, S. S., & Hand, D. (2006). One-Year Prevalence Rates of Major Depressive Disorder in First-Year University Students. *Canadian Journal of Counselling*, 40(2), 68-68-81.
- Reavley, N., & Jorm, A. F. (2010). Prevention and early intervention to improve mental health in higher education students: A review. *Early Intervention in Psychiatry*, 4(2), 132-142.
- Ryan, M. L., Shochet, I. M., & Stallman, H. M. (2010). Universal online interventions might engage psychologically distressed university students who are unlikely to seek formal help. *Advances in Mental Health*, 9(1), 73-83.
- Seligman, M. E. P. (2011). *Flourish*. New York, New York: Free Press.
- Seligman, M. E. P., Ernst, R. M., Gillham, J. E., Reivich, K. J., & Linkins, M. (2009). Positive Education: positive psychology and classroom interventions. *Oxford Review of Education*, 35(3), 293-311.
- Stallman, H. (2008). Prevalence of Psychological Distress in University Students. *Australian Family Physician*, 37(8).
- Stallman, H. (2010). Psychological distress in university students: A comparison with general population data. *Australian Psychologist*, 45(4), 249-257. doi: 10.1080/00050067.2010.482109
- Stallman, H. (2011). Embedding Resilience within the Tertiary Curriculum: A Feasibility Study. *Higher Education Research and Development*, 30(2), 121-121-133.
- Stallman, H. (2012). University counselling services in Australia and New Zealand: Activities, Changes, and challenges. *Australian Psychologist*, 47(4), 249-253. doi: 10.1111/j.1742-9544.2011.00023.x
- Stallman, H., & Shochet, I. (2009). Prevalence of mental health problems in Australian university health services. *Australian Psychologist*, 44(2), 122-127. doi: 10.1080/00050060902733727
- Vago, D. R., & Silbersweig, D. A. (2012). Self-awareness, self-regulation, and self-transcendence (S-ART): A framework for understanding the neurobiological mechanisms of mindfulness. *Frontiers in Human Neuroscience* (October 2012).
- Vivekananda, K., Telley, A., & Trethowan, S. (2011). A five year study on psychological distress within a university counselling population. *Journal of the Australian and New Zealand Student Services Association*(37), 39-57.
- Wong, J. G. W. S., Cheung, E. P. T., Chan, K. K. C., Ma, K. K. M., & Tang, S. W. (2006). Web-based survey of depression, anxiety and stress in first-year tertiary education students in Hong Kong. *Australian and New Zealand Journal of Psychiatry*, 40(9), 777-782. doi: 10.1111/j.1440-1614.2006.01883.x
- Wynaden, D., Wichmann, H., & Murray, S. (2013). A synopsis of the mental health concerns of university students: Results of a text-based online survey from one Australian university. *Higher Education Research and Development*, 32(5), 846-860.

The authors may be contacted:

switchpositive@live.com.au