



# EDUCATION FOR HEALTH

## ORIGINAL RESEARCH PAPER

# Value of a Health Behavior Change Reflection Assignment for Health Promotion Learning

---

**BK Lee, SM Yanicki, J Solowoniuk**

*University of Lethbridge, Lethbridge, Alberta, Canada*

---

*Published: August 2011*

**LeeBK, Yanicki SM, Solowoniuk J**

**Value of a Health Behavior Change Reflection Assignment for Health Promotion Learning**

*Education for Health, Volume 24, Issue 2, 2011*

**Available from: <http://www.educationforhealth.net/>**

## A B S T R A C T

---

**Introduction:** Health promotion is a recognized competency in the preparation and education of Addictions Counseling students. This qualitative study explores the value of a reflection assignment in an undergraduate health promotion course at the University of Lethbridge, Canada, towards developing Addictions Counseling students' health promotion competency.

**Method:** In the course, students attempted a health behavior change of their own choosing, reflected on their experiences and completed a reflection paper. Thematic analysis was conducted on students' reflection papers (n=21) and on a transcript of a focus group with four students to generate a description of students' perceived value of the assignment for their learning, personal health, and future health promotion practice in the field of Addictions Counseling.

**Results:** Three themes marked students' perceived increased capacity for healthy behavior and health promotion: (1) facilitating the change process; (2) integrating experiential and theoretical learning about health; and (3) growing as a health promotion practitioner and as a person with expanding capacity for health.

**Discussion:** This reflection assignment shows potential as both a learning process supporting future professional practice and as a tool for promoting health among undergraduate students.

**Keywords:** Health promotion, learning, professional practice, reflection, undergraduate students

---



## Introduction

Health promotion is one of the identified key competencies for the professional practice of Addictions Counseling<sup>1</sup>. More than the dispensing of health information, health promotion is the process of enabling people to take control of their health<sup>2</sup> and its determinants<sup>3</sup> by incorporating both a holistic view of health and addressing the factors constraining and enabling healthy choices in the context of everyday living<sup>4</sup>. Health promotion addresses health as a human right and as a positive inclusive concept encompassing physical, social, mental and spiritual health and quality of life<sup>5</sup>.

This article reports on the value of a reflection assignment in an undergraduate health promotion course for Addictions Counseling students at the University of Lethbridge, a mid-sized university in Western Canada. The Addictions Counseling Program (ACP) was developed in the mid-1990s as a response to the widening crisis of addiction globally<sup>6</sup>. Currently, this program is the only Bachelor's Degree program in Canada that prepares addictions counselors for front-line work in the areas of prevention, assessment and treatment of substance dependency, problem gambling, sex addiction and other addictive behaviors. Graduates find employment in addictions inpatient and outpatient treatment services, detoxification centers, mental health, community youth, family and social services, women's shelters, educational settings and employee assistance programs<sup>7</sup>. The ACP provides students with the knowledge and skills to help individuals heal from addicted lifestyles, and to address systemic problems beyond the level of the individual to include problems that originate from and impact families, groups, communities and the population at large. In 2006, the ACP was approved by the Canadian Addictions Counseling Certification Federation as an educational program that addressed the knowledge and competency areas for the International Certified Alcohol and Drug Counselor designation. The ACP also aligns with the technical and behavioral competencies set out by the Canadian Centre on Substance Abuse<sup>1</sup>.

The reflection assignment was designed in a course to support personal and professional capacity development in health promotion. Capacity is conceptualized as a set of knowledge, skills, commitment and resources for planning and implementing health promotion activities<sup>8</sup>. Reflection as a learning tool has been described in many disciplines, including nursing<sup>9</sup>, medicine<sup>10</sup>, education and adult learning literature<sup>11,12</sup>. Reflection techniques have been used to support students' self-awareness of their attitudes, values and beliefs<sup>13</sup>, and to personalize learning experiences<sup>11</sup>. Despite the widespread use of reflection, its use in health promotion education has not been sufficiently explored.

There is no consensus on the definition of reflection<sup>9,14</sup>. Reflective writing assignments vary in both structure and focus<sup>15</sup>. Assignments may range from unstructured journaling for private use, to graded semi-structured or structured assignments; the focus can favor subjective and inward self-awareness for personal growth to an outward concentration on course content and its application<sup>15</sup>. Journaling as a pedagogical tool has been described as the process of reflection in linking life experiences, feelings, educational experiences and theoretical knowledge to support action<sup>11</sup>.

## Method

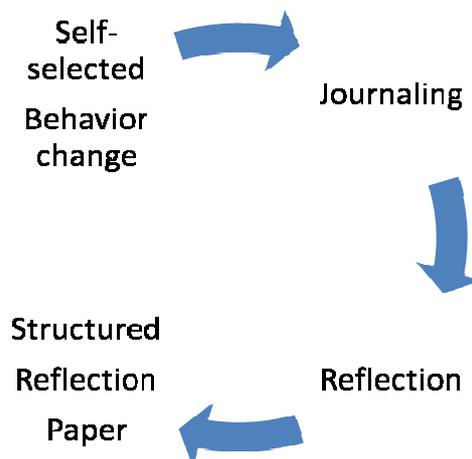
### *The Health Promotion Course and Reflection Assignment*

The health promotions course was structured to cover: (1) the concepts of health and health promotion; (2) health beliefs, health risks, models of motivation and behavior change; and (3) a socio-ecological framework for interventions at individual, group/community, and population levels. The reflection assignment was completed in the first four weeks of the course.



The reflection assignment consisted of four components: (1) choosing a health behavior and an attempted behavior change students undertook over a four-week period, (2) private documentation of experiences through unstructured journaling, (3) reflection on the process of change, health behavior, health promotion learning and theory, and (4) submission of a structured 8-10 page reflection paper (Figure 1). Health behaviors selected for change were not limited to addictive behaviors such as smoking cessation, but included a range of health issues, e.g. healthy eating, physical activity, weight loss, stress management, compulsive eating, anxiety and sleep deprivation.

While students were encouraged to make regular journal entries, only the reflection paper was submitted. Journaling was used to document, plan and track their overall change process including attempts, thoughts, feelings and insights. The reflection papers of participating students were then collected for thematic analysis in this study. Students were asked to substantiate their reflections with quotes from their journals. In the paper, students were instructed to describe their motivation for the health behavior change, the origins of their health behavior (psycho-social-cultural and environmental factors), the factors that helped and hindered the attempted behavior change, and the implications of their learning for future health promotion and addictions counseling practice.



**Figure 1: Components of the reflection assignment**

---

### ***Researching the Reflection Assignment***

Two research questions guided this exploratory descriptive study: (1) What health promotion strategies, processes and factors are perceived by students to influence their chosen health behavior change? (2) What do students perceive and describe to be the value of the health behavior change reflective assignment?

### ***Student Participants***

Student participants were recruited from two undergraduate health promotion courses in two consecutive years. A class announcement and a written recruitment letter were used. Student participation in this study was voluntary. Students were assured of anonymity and confidentiality, and informed that findings, including verbatim quotes, would be used for publications to inform future health promotion activities and programs. They were assured that non-participation in the study would not be penalized. Twenty-one students provided written consent to participate; approximately 33% of students enrolled in the two courses.



Participants remained unknown to the principal investigator (first author) who was the professor for the course until after completion of the course. Ethics approval for the study was received from the university research ethics committee. This study received funding support from a university grant to promote excellence in teaching.

### *Data and Analyses*

The reflection papers of the students who voluntarily participated in the evaluation were subjected to analyses. In addition, one focus group with four study participants from the two cohorts was facilitated by the co-investigators (faculty not involved in the course), tape recorded and transcribed verbatim. Participants were asked how helpful the processes of undertaking a health behavior change and writing a reflective paper were for their learning and to corroborate on the thematic findings. Participants' recommendations were also elicited on ways to improve the reflection assignment in the future. The focus group was conducted following the second course at the end of the school year, and the response to the focus group invitation was low.

Thematic analysis of these data was guided by Braun and Clarke's approach<sup>16</sup> within an emergent design<sup>17</sup> which allowed the refining of the research questions as the analysis progressed. Initially, data from the reflection papers and focus group transcript were categorized according to the structure of the assignment and the focus group questions. The researchers read and reread individual and aggregated versions of the reflection assignment and the focus group transcript to note and name the themes in answer to the research questions.

## Findings

Study participants were enrolled in second, third and fourth years of the Addictions Counseling degree program (mean years in university = 2.6). Participants were 90% Caucasian and 10% First Nations, predominantly female (76%) and reported a mean age of 25.6 years (range: 17 to 55 years). In this study, 52 % of participants reported having a pre-existing medical or psychological condition that either restricted their physical activity or impacted their overall physical and psychological well-being (Table 1).

**Table 1: Participants' reported health conditions prior to health behavior change**

Health Condition	Number of Participants (n=11/21 participants)
Ankle Injury (Pain and Inflammation)	1
Heart Disease and Angioplasty	1
Pulmonary Embolism	1
Obesity	3
Overweight	2
Eating Disorders (Binge Eating and Compulsive Eating)	2
Obsessive Compulsive Disorder	1
Disability following an Injury (Fracture)	1
Depression	1
Substance Abuse & Addiction	5



Three themes captured key study findings about students' perceptions of the reflection assignment: (1) Facilitating the process of change; (2) Integrating theoretical and experiential learning; and (3) Growing as a health promotion practitioner and as a person with expanding capacity for health.

### ***Facilitating the Process of Change***

Students generally reported that the reflection assignment engaged them in the process of working intentionally with a chosen health behavior. While some students reported that they were ready to take up a health behavior change course, others reported that their motivation was uncovered only through the assignment. Reflective papers revealed participants' struggles and insights, successes and failures. The transtheoretical model of change<sup>18</sup> was referenced explicitly by some students who used it to gauge their change process.

*I recognize that prior to this exercise; I was indeed at a pre-contemplative and contemplative stage. By engaging myself in the effort to establish a journal... I entered into the action stage. I cannot say that I have moved into the maintenance stage as there are still aspects of this behavior which even now I am still uncovering (ID#1).*

Participants reported using journaling to monitor their progress and to spur motivation. One student wrote, 'I found that as I kept a journal, looking over past days helped motivate me for the future' (ID # 9). Planning was cited as an important component in their change process. Journaling allowed students to gain insights into what worked and what hindered them, and served as a container to vent frustrations and feelings that arose during the health behavior change process:

*Journaling for this assignment helped me to understand why I was smoking and when I would be most vulnerable to relapsing. I wrote in my journal twice a week and this helped me get through some of the frustrations of quitting because it allowed me to express my feelings on paper (ID #4).*

Of greatest import was what they learned about themselves through both successes and failures:

*In accordance with my initial goal, I was not highly successful. However, I do not hold any regrets about the past four weeks in that the epiphany I had is of way more benefit to me (ID#10).*

*Although I did fail my original goal of the elusive 10 o'clock bedtime, I still feel that I have succeeded in learning about behavior change and its complications... Overall, I feel this project has been beneficial for me, both academically and physically (ID#15).*

Some derived satisfaction in having achieved a goal and reached a turning point with valuable skills that they could apply to achieve a better quality of life beyond the assignment.

*As I successfully push ahead to the realm of 'action' and 'maintenance' I will have acquired a most valuable skill set, one which will empower me to significantly increase the odds of maintaining a quality of life – even quite literally, life itself... It has been a pleasure working on this project, the sort of pleasure associated with reaching a turning point that illuminates new horizons in one's life (ID#10).*



A few students described having pushed beyond their former limits and making a transformative change.

*I have made a life altering decision, and I have actually kept it. It has not been easy for me to change habits that I have had for nearly my entire twenty-three years, but I have. This personal experience has made me more aware of my limits and of how to push them (ID#13).*

The ring of confidence in one students' narrative reflected gains in self-knowledge and the use of personalized strategies:

*This experience has taught me a lot about myself. I have learned a lot about which steps are useful for me in attempting to change my behaviors. I have learned about the things that hinder my success, as well as those things which help me achieve my goals (ID#7).*

Overall, most participants described having had some success in attempting a self-reported behavior change. Through experimenting with various steps and strategies, students found that the assignment had moved them along the trajectory of change.

### ***Integrating Experiential and Theoretical Learning***

While theories and frameworks offered support to the students' understanding of their experience; students' experiences also helped them appropriate and appreciate the meaning of theories and concepts. Several students noted resonance between their experiences and theories presented in the course.

*A number of theoretical frameworks resonated with me... I turned the page and the next boost to my level of self-confidence appeared. It was a tool I was already familiar with, yet [had] never applied to my own situation...the 'transtheoretical model of behavior change'... It was an 'aha' moment for me (ID#10).*

### ***A Holistic Experience of Health***

A number of students reported gaining a broader understanding of the multi-dimensionality of health. Through the change process, students soon discovered the interconnections of the physical, psychological, emotional, social and spiritual domains of health and well-being. An attempted change in one area led to reflection on other interrelated issues in their lives. One student's initial focus on physical fitness shifted to a focus on a spiritual health and social support:

*There was a point in my journal where my reasons for exercising shifted. Originally I wanted to 'get back in shape' which for me has always meant becoming more physically attractive by losing weight. My self image has always been greatly tied to how others perceive me. On [date] I wrote about wanting to change this process by saying that 'I am hoping that I can get to a place where I feel confident about myself for just being me.' ... My focus shifted from changing a physical behavior to improving my spiritual health by broadening my social support network (ID#2).*

Another student reported working on stress reduction and discovered links to eating habits:



*From this four-week experience, I have come to learn [that] the more stress I experience, the more negative emotions result, and the more I resort to eating...[While] working on this paper, I have allowed myself the time to reflect and prioritize, and have not resorted to eating (ID#18).*

Through their own experience, students learned first-hand the limitations of a compartmentalized view of health. As one student concluded at the end of the assignment:

*While engaging in the behavioral transformations for this paper I discovered just how interconnected the concept of good health is. When I began to attempt changing one specific behavior, it had a combo effect. Therefore, I ended up focusing my efforts on a myriad of related issues, with a common pathway that lead to stress reduction and general well-being (ID#3).*

#### *An Ecological Understanding of Health*

Participants reported becoming more critically aware of the impact of socio-ecological context on their health behaviors. They learnt how family practice and social norms of the day supported the development of their problematic health behaviors, and how contemporary trends have an impact on their incorporation of healthy behaviors. One participant reported being favorably influenced by her parents' efforts to become more health and fitness conscious. Another student gained insight into the origins of his smoking behavior:

*I grew up around a family of smokers who gave cigarette smoking a classy edge...I would always be mimicking the adults by pretending to smoke...This is the introduction to me normalizing cigarettes and participating in the social norms of tobacco use (ID#4).*

Yet another participant observed how smoking behaviors were supported by a wider socio-cultural context which 'encourages the use of substances for personal pleasure; whether it is food, drinks/alcohol, medications, cosmetics or tobacco' (ID#7).

University life was described by participants as a challenging period of life transition that posed both health risks and opportunities. Students' narratives highlighted the impact of the pressures of university life (achievement, time and finances) and the loss of social support that disposed their adoption of risky health behaviors, such as poor diet, drinking and smoking. On the other hand, university transitions also supported positive health change, such as being in a different environment, accessing a new social support network and campus professional services, and re-evaluating critically their poor health behaviors through the lens of new knowledge. In particular, many students appreciated how central was their social and community support in fostering health changes:

*I think the most important contribution that this process to my functioning as a health promoter is to look at issues on a more social rather than individualistic scale... I think that if a focus on health education and promotion was on strengthening communities, many societal problems would be decreased... If people felt fulfilled through friends and family perhaps they would not feel the need to succumb to advertisements suggesting over-consumption (ID#2).*



Participants in the focus group suggested that in-class group discussion and group-based support could further enhance the effectiveness of the reflection assignment, attesting to the value they placed on peer support. The role of policies and factors at the population level as an influence on their health was noted by fewer students. Recognizing that health is more than an individual affair sensitized students to the influential role of the ecological context for health.

### ***Personal and Professional Growth***

#### *Personal Growth*

While an alarming proportion of students in this sample suffered from physical and psychological health problems prior to this course, only a minority had attempted to make changes to improve their condition. Initially, physical appearance was often the motivator for attempted change more than well-being.

*At times I feel like my perceived need for physical activity is only because I desire to look a certain way, and not because I actually care about being healthy (ID#5).*

As reflection on their health behavior change progressed, students reported better appreciation for the value of health. Students' self-discovery through reflection, combined with new knowledge on health promotion shifted the value they placed on health.

*I was tired, I felt weak, and I was pale, amongst other indicators of poor health. So, I switched my thinking, I was no longer interested in just losing weight. I was going to be healthy (ID#13).*

Greater awareness about one aspect of health behavior directed their attention to another:

*Being more aware of my nightly routine and my sleep patterns has helped me become more conscious of my overall health, and I have begun to get back into caring about health by eating better (ID#15).*

Once students chose an area of health behavior change, they utilized research to educate themselves about their particular topic. Knowledge increased their motivation to make more radical health changes.

*I felt that research and literature help develop my mind on the topic of weight loss and healthy eating. I also feel being educated helps motivate change (ID#9).*

As students came to see the centrality of health to their lives, they developed a protracted horizon in viewing their health today and how it will affect their health and choices tomorrow:

*It is important for me to get in control of my eating habits now because I am young. I have my whole life ahead of me and I don't want to have health problems or miss out on activities or events because I do not feel comfortable with my body (ID#6).*



Most students reported gaining an improved understanding of their health choices and a few students reported making a sustained behavioral change.

*This paper has given me a unique opportunity to learn and benefit from the information gathered and I definitely will use what I have learned in the future, in terms of lifestyle choices, not just exercise (ID#21).*

In summary, students reported an increase of their capacity for health through knowledge about the complexity of health. They had increased self-awareness, realizing what strategies worked uniquely for them, and embraced a greater commitment to better health today to accrue benefits for tomorrow.

#### *Professional Growth*

Not only did the reflection assignment expand personal capacity for health, it also enhanced students' professional capacity as health promotion practitioners.

*Empathy and Compassion:* Students valued their own experience and struggles as a way of deepening their level of 'empathy' and 'compassion' for those they will assist in the change process:

*This exercise made me more sensitive to the difficulty and the challenge that come with attempting to make behavior changes. It is no easy feat, especially when cultural norms and values come into play... changing behaviors also becomes more trying when it has a long history with an individual. This experience has definitely helped me become more empathetic and compassionate to individuals seeking change (ID#1).*

Students described gaining more realistic expectations of their clients and the capacity to work with others as a practitioner who has 'walked the talk.' One student described becoming more tolerant of setbacks and becoming less judgmental.

*And finally, because change is difficult, there must be allowances made for setbacks, and an empathic, non-judgmental attitude must be employed at these times (ID#21).*

They described gaining a new respect for those who make health behavior changes.

*Just being a non-smoker for a little over a month, I have a real respect for people who have smoked for decades and have now quit (ID#4).*

Some students drew the parallel between giving up an addiction and working on a health behavior change. The same strategies for change could apply. The importance of health promotion in the prevention of addictions became clear.

*I now know the importance of promoting healthy behaviors before they even become a problem, because once the addiction has been going on for a while it's very hard to break the cycle (ID#4).*



*Individualizing Change Strategies:* The awareness that the process of change may be different for each individual sharpened for a number of students through reflecting on their own change process. Strategies that work well for one person may not work for the next.

*My personal strategy for quitting smoking has worked for me. However, I realize that it may only work for me. I have developed this strategy - with specific key elements – through my own experience attempting to change my behavior. The combination of things which I have found to be beneficial seems to be unique to me. This has opened my eyes to the fact that everybody...responds to different stimuli, so everybody needs somewhat of a different set of strategies to help them change any behavior (ID # 7).*

Students described being more sensitive to a personalized approach when working with individuals, exercising greater adaptability and flexibility to meet the demands of the individuals they serve.

## Limitations

Findings in this study are limited by the small sample of participating Addictions Counseling students and hence findings may not be representative of students in the health promotion course or the general population of undergraduate students. It is possible students' self-reports could have been influenced by concerns for social desirability<sup>19</sup>, and students who elected to participate might have been ones who benefited from the assignment, thus introducing a positive bias.

## Discussion

'Health-as-a-Value' is a concept that has been found to organize health-related beliefs and intentions<sup>20</sup>. It is reportedly one of the strongest predictors of healthy behaviors among college students<sup>20</sup>. Thus it is of importance that students reportedly learned to embrace their own health to a greater degree with the reflection assignment. Empathy is a cornerstone of counseling practice<sup>21</sup>, not to mention that it is known to be a key factor in predicting positive change in clients<sup>22</sup>. As an attitude and disposition, empathy cannot be easily taught didactically<sup>23</sup>, but it can be grasped through experiencing and becoming attuned to one's own world, thereby allowing us to join with another's perspective<sup>24</sup>. Thus, when students reflect and write about their own change process, they are in fact developing a capacity to be empathic and hence more effective practitioners.

A socio-ecological lens applied to the prevention of addictions has not been prominent in addictions literature<sup>25,26</sup>. The structure of the reflective assignment facilitated students' exploration of health and addiction within a broad socio-ecological context at individual, family, community and societal levels. Because of the recalcitrance of many health behaviors and their embeddedness in a socio-environmental network of interconnections<sup>2,27</sup>, students gained new insights into what health promotion practice needs to address. Overly simple solutions to health problems focused on information to change individual health behaviors can no longer be assumed to be sufficient. This approach resonates with concepts of health and health promotion in the Ottawa and Bangkok Charters<sup>2,5</sup>.

Participants reported discovering the complexity of health amidst socio-environmental influences and critically assessed the environmental risks in familial and social contexts influencing their behavior. They described increased motivation, confidence and



belief in their ability to successfully pursue a health behavior change. These gains are consistent with increased self-efficacy<sup>28,29</sup> for behavior change.

Universities have been identified as sites for health promotion by the Health Promoting Universities movement<sup>30</sup>, and this study also highlighted attending university as an important life transition. In this study, 52% of participants reported a pre-existing medical or psychological condition, while one third of university students reported long-standing illnesses in another study<sup>31</sup>. Attention to better health among university students is certainly needed, with potentially long-term ramifications for their quality of life and the burden on the healthcare system.

## Conclusions

Historically, prevention and health promotion have had many road-blocks in attaining the place they deserve in addictions and health services relative to treatment<sup>27</sup>. Based on the analyses of students' reflection papers, the assignment was supported as a valuable learning process that expanded students' personal and professional capacity towards competency as addictions counselors. It has garnered students' commitment to their health promotion role and helped them view addictions as existing among a range of health risks with complex interactive determinants. Hence, this reflection assignment shows value in supporting professional practice and as a tool for promoting health among undergraduate students. Future studies using this assignment within other academic disciplines would be beneficial.

## Acknowledgement

The authors wish to thank Jessica Andrusiak, Christen Terakita and Pat Poriz for their assistance in the preparation of this manuscript.

## References

1. Canadian Centre on Substance Abuse. Technical competencies for Canada's substance abuse workforce: Final Report. Canadian Centre on Substance Abuse. 2007 [cited June 9, 2010]. Available from: <http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa0115242007.pdf>
2. World Health Organization. The Ottawa charter for health promotion [Online]: World Health Organization, Health Canada; 1986 [cited September 23, 2000]. Available from: [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0004/129532/Ottawa\\_Charter.pdf](http://www.euro.who.int/__data/assets/pdf_file/0004/129532/Ottawa_Charter.pdf)
3. Raphael D, Bryant T, Curry-Stevens A. Toronto charter outlines future health policy directions for Canada and elsewhere. *Health Promotion International*. 2004; 19(2):269-273.
4. Kelleher C. Education and training in health promotion: theories and methods. *Health Promotion International*. 1996; 11:47-53.
5. World Health Organization. The Bangkok charter for health promotion in a globalized world. [Online]: World Health Organization; 2005 [cited June 22, 2011]. Available from: [http://www.who.int/healthpromotion/conferences/6gchp/hpr\\_050829\\_%20BCHP.pdf](http://www.who.int/healthpromotion/conferences/6gchp/hpr_050829_%20BCHP.pdf)
6. Alexander BK, *The globalization of addiction: A study in poverty of the spirit*. Toronto: Oxford University Press; 2008.



7. Nixon G, Solowoniuk J. *Academic quality assurance self-study report*. Addictions Counselling Program. School of Health Sciences, University of Lethbridge; 2006.
8. McLean S, Feather J, Butler-Jones D. *Building health promotion capacity: Action for learning, learning from action*. Vancouver: UBC Press; 2005.
9. Atkins S, Murphy K. Reflection: A review of the literature. *Journal of Advanced Nursing*. 1993; 18(8):1188-1192.
10. Rakel DP, Hedgecock J. Healing the healer: A tool to encourage student reflection towards health. *Medical Teacher*. 2008; 30(6):633-635.
11. Lauterbach SS, Becker Hentz P. Journaling to learn: A strategy in nursing education for developing the nurse as person and person as nurse. *International Journal of Human Caring*. 2005; 9(1):29-35.
12. Jarvis P. Journal writing in higher education. *New Directions for Adult and Continuing Education*. 2001; 90:879-886.
13. Ballon BC, Skinner W. Attitude is a little thing that makes a big difference: Reflection techniques for addiction psychiatry training. *Academic Psychiatry*. 2008; 32(3):218-224.
14. Quinton S, Smallbone T. Feeding forward: Using feedback to promote student reflection - a teaching model. *Innovations in Education & Teaching International*. 2010; 47(1):125-135.
15. Varner D, Peck SR. Learning from learning journals: The benefits and challenges of using learning journal assignments. *Journal of Management Education*. 2003; 27(1):52-77.
16. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006; 3:77-101.
17. Patton M. *Qualitative research and evaluation methods*. 3 ed. Thousand Oaks: Sage Publications; 2002.
18. Prochaska JO, Norcross JC, DiClemente CC. *Changing for good: The revolutionary program that explains the six stages of change and teaches you how to free yourself from bad habits*. 1st ed. New York: W. Morrow; 1994.
19. Yegidis BL, Weinbach RW. *Research methods for social workers*. 5th ed. Boston: Pearson Education, Inc; 2009.
20. Ritt-Olson A, Milam J, Unger JB, Trinidad D, Teran L, Dent CW, Sussman S., The protective influence of spirituality and "Health-as-a-Value" against monthly substance use among adolescents varying in risk. *Journal of Adolescent Health*. 2004; 34(3):192-199.
21. Egan G. *The skilled helper: A problem-management and opportunity-development approach to helping*. 9th ed. Belmont: Brooks/Cole; 2009.
22. Feller CP, Cottone RR. The importance of empathy in therapeutic alliance. *Journal of Humanistic Counseling, Education and Development*. 2003; 42:53-61.



23. Nerdrum P, Ronnestad MH. The trainee's perspective: A qualitative study of learning empathic communication in Norway. *The Counseling Psychologist*. 2002; 30(4):609-629.
24. Macaulay HL, Toukmanian SG, Gordon KM. Attunement as the core therapist-expressed empathy. *Canadian Journal of Counselling*. 2007; 41(4):244-254.
25. Kothari A, Edward N, Yanicki S, Hansen-Ketchum P, Kennedy, MA. Socioecological models: Strengthening intervention research in tobacco control. *Drogues, santé et société*. 2007; 6(1): iii1-iii24.
26. Yanicki S, Gregory D, Lee B. Gambling behaviours among Aboriginal peoples: Indigenous and critical socio-ecological perspectives. In Belanger Y. (Ed.) *First Nations gaming in Canada*. (pp. 195-226). Winnipeg, MB: University of Manitoba Press; 2011.
27. Frank J, Di Ruggiero E, Moloughney B. *The future of public health in Canada: Developing a public health system for the 21st century*. [Online]: Canadian Institutes of Health Research; 2003. Available from: [http://www.phac-aspc.gc.ca/php-ppsp/pdf/future\\_o\\_public\\_health\\_in\\_canada\\_june2003.pdf](http://www.phac-aspc.gc.ca/php-ppsp/pdf/future_o_public_health_in_canada_june2003.pdf)
28. Bandura A. *Social foundations of thought and action: A social cognitive theory*. Upper Saddle River: Prentice-Hall; 1986.
29. Bandura A. *Social learning theory*. Englewood Cliffs: Prentice Hall; 1977.
30. Tsouros AD. From the healthy city to the healthy university: project development and networking. In Tsouros, AD, Dowding G, Thomson J, Dooris, M. (Eds.), *Health promoting universities: Concept, experiences and framework for action*. Copenhagen: World Health Organization, Regional Office for Europe. 1998; 11-19.
31. Stewart-Brown S, Evans J, Patterson J, Petersen S, Doll H, Balding J, et al. The health of students in institutes of higher education: an important and neglected public health problem? *Journal Of Public Health Medicine*. 2000; 22(4): 492-499.
-