

การเรียนรู้เกี่ยวกับชุมชนด้วยวิธีที่มีประสิทธิภาพในการจัดการเรียนการสอนจิตวิทยา

การให้คำปรึกษา: โครงการศึกษาในกลุ่มนักศึกษาไทย

Community Learning as an Effective Way to Facilitate Learning

Counselling Skills: A Study Project of Thai University Students

ทรายวนิช ชาลีรักษ์ตระกูล* ชาลาลัย แต้ศิลปสาธิต เกียรติศักดิ์ จังเจริญจิตต์กุล บุรชัย อัศวาวีบุญ

และ จารวรรณ ศกุลคู

Trawin Chaleerakrakoon, Chalalai Taesilapatasithit,*

Kiattisak Jangcharoenjittkul, Burachai Asawathaweeboon and Jaruwan Sakulku

สาขาวิชาจิตวิทยา คณะศิลปศาสตร์ มหาวิทยาลัยธรรมศาสตร์

Division of Psychology, Faculty of Liberal Arts, Thammasat University

*Corresponding author: Email: t.chaleera@gmail.com

Received: July 8, 2019; Accepted: July 31, 2020)

Abstract Counselling skills are learned effectively when implemented in a real-world context. The aim of this project was to set up an activity where psychology students would have a platform to apply counselling skills learned in the classroom into a real-world setting, gain valuable experience talking to the members of the community, and analyse the community structure. Volunteers were Psychology majors at Thammasat University. All volunteers attended an exploratory session with officials who worked in the community, two lecture sessions, and took part in two community visits. Volunteers wrote an initial paragraph about goals and expectations and rated their current knowledge. Focus groups were conducted throughout the project to indicate volunteers' progress. Volunteers completed a reflection paper upon the conclusion of the project. Analysis of the initial paper and the reflection paper showed that the project was effective in facilitating learning. Analysis of the focus groups showed an increase in the depth of understanding of the community structure, which culminated into thoughtful suggestions on future community interventions. The results seem to suggest that community learning should be conducted alongside classroom learning so that students gain a greater understanding of information learned in the classroom and application of such information.

Keywords: Higher education, counselling skills, community structure analysis

บทคัดย่อ การเรียนทักษะจิตวิทยาการให้คำปรึกษาจะมีประสิทธิภาพเมื่อได้เรียนรู้ในสังคมจริง โครงการนี้มีวัตถุประสงค์เพื่อให้นักศึกษามีพื้นที่ในการประยุกต์ทักษะจิตวิทยาคำปรึกษาที่ได้เรียนในห้องเรียนไปสู่ชุมชน ได้รับ

ประสบการณ์จากการพูดคุยกับสมาชิกชุมชน และวิเคราะห์โครงสร้างชุมชนได้ ผู้เข้าร่วมโครงการเป็นอาสาสมัคร นักศึกษาสาขาวิชาจิตวิทยา มหาวิทยาลัยธรรมศาสตร์ อาสาสมัครทุกคนทำการสำรวจชุมชนร่วมกับเจ้าหน้าที่ ร่วม อบรมในชั้นเรียน 2 ครั้ง และ ลงเยี่ยมชุมชน ก่อนเข้าร่วมโครงการอาสาสมัครรายงานเป้าหมายและความคาดหวัง และประเมินความรู้ของตนเอง โดยใช้การสนทนากลุ่ม เป็นวิธีในการวัดความคืบหน้าของการเข้าร่วมโครงการ เมื่อ โครงการสิ้นสุดลง อาสาสมัครรายงานสะท้อนความรู้สึกและสิ่งที่ได้รับจากการวิเคราะห์พบว่าโครงการนี้มี ประสิทธิภาพในการส่งเสริมการเรียนจิตวิทยาคำปรึกษา การสนทนากลุ่มแสดงให้เห็นว่า อาสาสมัครมีความเข้าใจ เกี่ยวกับโครงสร้างชุมชนเพิ่มขึ้น และสามารถวางแผนเพื่อการทำงานเชิงรุกร่วมกับชุมชนได้ ผลของโครงการสะท้อน ให้เห็นว่า การเรียนรู้เกี่ยวกับชุมชนควรจัดควบคู่ไปกับการเรียนในชั้นเรียน เพื่อให้นักศึกษามีความเข้าใจ และ สามารถนำไปประยุกต์ใช้ได้

คำสำคัญ: การศึกษาระดับบุคคลศึกษา ทักษะจิตวิทยาการให้คำปรึกษา การวิเคราะห์โครงสร้างชุมชน

Introduction

An important goal of education is to facilitate an environment for students to learn and be able to apply the skills and knowledge in a real-world environment. Many psychology courses are still structured around lectures, which have merits (Goffe and Kauper, 2014) as well as limitations, namely unidirectional communication and an inactive environment (Sadeghi *et al.*, 2014; Schmidt *et al.*, 2015). These limitations can have a significant impact when teaching skills that are based on communication and activity such as subjects like counselling. Moss and Glowiak (2013) highlight fundamental counselling skills such as attending skills and listening skills as being important. In addition, Hill (2014) emphasizes the need to be actively in tune with the client. Because of their interactive nature and general use outside the classroom (Moss and

Glowiak, 2013), learning within the classroom alone, may not be adequate.

One real-life setting where one may be required to apply counselling skills is within the community. Important functions of working within the community are to devise interventions, and promote wellness within the community through identifying and utilizing the strengths of the community. When working on such programs, it is essential to have an understanding of how that community functions. Particularly, one must undertake a community structure analysis, which will allow for greater understanding about how the community affects mental health (Wandersman and Nation, 1998). In order to undertake a community structure analysis, information must be obtained from members of the different community networks. Students must apply their counselling skills in order to

obtain the necessary information to analyse the community structure. In addition, counselling skills may also aid in planning further work with community members.

An increasingly popular method used in education is service learning, which integrates the classroom and the community (O'Brien *et al.*, 2006). Service learning allows for what has been learned in the classroom to be enhanced by gaining experience in applying those skills within the community (Prentice and Garcia, 2000). Indeed, the experience can contribute to gaining expertise in using such skills, which in turn will be important for those who choose to pursue a career in the field once they graduate, as expertise and competence has been found to be a crucial factor in assessment and improvement of Thai graduates (Puncreobutr, 2018). In addition, service learning has been shown to affect personal growth, and allow students to gain a greater understanding and appreciation of how different communities operate (Eyler and Giles, 1999), including social problems and community structures that contribute to them (Marullo, 1998). Working in groups has also been shown to enhance student learning (Boud *et al.*, 2013; Kyndt *et al.*, 2013; Tlhoaele *et al.*, 2016). Ball and Pelco (2006) reported that in comparison to classes that used traditional lectures, the quality of class

discussion, interest, and material learned was significantly greater for students who took part in cooperative learning. This suggests that students can gain a greater understanding of the material by working in groups and gaining first-hand experience.

These findings led us to create a project where students would work in groups and apply counselling skills to their work in the community, gain first-hand experience in a realistic and interactive context, and analyse community structure through community learning. Following this, they would devise an intervention or a promotion of wellness program. The hypotheses are that after completing this project, students will be able to better apply counselling skills in the community, and students will be able to understand the community better through community structure analysis.

Method

Participants

A total of 22 students (17 females and 5 males) originally applied to take part in this project. Twenty-one participants completed the entire project. All student volunteers were third or fourth year undergraduate Psychology students at Thammasat University. Additionally, all had previously taken the courses: Introduction to Counselling and Mental Health. The age of

student volunteers ranged from 21-23 years. Thirteen of the student volunteers were from the Bangkok metropolitan area, 2 were from the central region of Thailand (outside of the Bangkok metropolitan area), 2 were from the eastern region, 2 were from the western region, 2 were from the north-eastern region, and 1 was from the southern region. Twenty student volunteers were from families with an income of at least 30,000.00 Baht per month. This puts them in at least the fourth tier of 8 in terms of socioeconomic status in Thailand (Poomontre and Setthawong, 2016).

Community

The community that was used in this study is known as the Ta Klong community. It is a working-class community close to Thammasat University. The community comprises of various ethnic groups from numerous parts of Thailand and surrounding areas. It was chosen due to its proximity to the university and the willingness of district officials to facilitate this project.

Procedure

This project took place between February – May 2018. Student volunteers who agreed to participate first took part in the **Initial Session** where the aims and agenda were communicated to them. This was followed by an initial community visit where students were introduced to the

community and community officials to ensure they had a basic understanding of the community that they would later be entering. After which, **Focus Group 1** was conducted to allow the student volunteers to reflect upon their first impressions of the community and to evaluate their readiness for the project. Student volunteers subsequently took part in two lecture sessions on community psychology. A major focus of the lecture sessions included identifying interesting networks within the community population, particularly, how populations interacted both within each network and between networks. Additionally, the lecture sessions emphasized application of counselling skills in obtaining information from members of community networks. Another topic covered was how information obtained from the community members may be used in order to construct a community structure analysis. This led into the second lecture topic, which was centred on key concepts on intervention and promotion of wellness plans within the community. Emphasis was on devising and implementing such plans. After both lecture sessions were complete, students formed 3 groups and **Focus Group 2** was conducted to allow groups to take information from the lectures and devise a possible plan to put

the information to use in their upcoming community visits. Student volunteers then took part in their second and third community visits in their groups. Each group chose to focus on different community networks. Through interaction with community members, students collected information about their community networks to identify strengths and weaknesses within the community. Each community visit was followed by a focus group (**Focus Groups 3 and 4**). These focus groups addressed the strengths and weaknesses of their chosen network. This allowed groups to devise a community structure analysis of how the chosen networks within the community interacted with one another in the **Final Focus Group**. Additionally, each group formulated intervention and promotion of wellness programs. Students were also asked to write a brief evaluation that detailed their learning experience throughout the project.

All focus groups in this project were led by the researchers. In each focus group, student volunteers were asked a series of questions related to the preceding session. Student volunteers responded in groups. Responses were recorded and analysed by the researchers. Researchers evaluated student learning through comprehensive analyses of the focus groups and students' written work.

Results

Initial Session

Prior to the first community visit, students appraised their own knowledge about counselling skills and ability to apply these skills to working in the community. Most students appraised their current skills at being "very low" (45%) or "low" (45%). Another 10% of students appraised their ability at being "moderate" despite having taken Introduction to counselling prior to taking part in this project. The content analysis on the student volunteers' short paragraph revealed consistent themes. All student volunteers wrote about how they wanted to improve their current skills. In particular, communication, counselling, and structured thinking skills were highlighted. A second theme that emerged was that students wanted practical experience in a general sense. All but 2 student volunteers indicated that it was something they wanted to gain from this project. Also, many students specifically mentioned that they wanted to gain experience in community work.

Focus Group 1

Following the first Ta Klong community visit, student volunteers took part in a focus group. Firstly, student volunteers were asked about their opinion of the first community visit. Initial responses

seemed to gravitate towards how local district officials were very meticulous in presenting general information of the community. The presentation also seemed to veer towards the positive aspects of the community, including successful campaigns by the district officials. Consequently, many student volunteers responded that based on the information they gathered from the first community visit, they were unsure of where to insert themselves into this project. Additionally, student volunteers were aware that while the district officials did manage to give an overall positive picture of the community, any information obtained was from the officials' perspective, rather than community members'. Student volunteers concluded that there were perhaps problems unreported by, or unknown to the officials, and that a better source of this information was the actual community.

The student responses in the initial question also seemed to focus on the idea that one goes into communities due to there being a specific problem that needs to be solved. In response to this idea, researchers then asked student volunteers to think about whether one does work in the communities, simply because there are apparent problems to be solved of if there were other reasons. Student volunteers were in agreement that

prevention of potential problems was also a reason for one to work in the community.

Finally, researchers asked student volunteers to evaluate how ready they were to work in the community at this point. The responses ranged from not ready at all to not very ready. Student volunteers highlighted their lack of knowledge, practical experience, and overall lack of confidence as reasons for why they felt they were not ready.

Focus Group 2

After the lecture sessions were finished, student volunteers took part in another focus group. A major focus of this focus group was for the students to reflect on the lecture and how it would help them in their upcoming community visit. Student volunteers generally felt that the lecture gave them a better understanding of community structures in general, as well as clearer goals for student volunteers to strive for in their skill application. For example, one student volunteer expressed how the lecture sessions gave student volunteers a better understanding of what types of questions were more effective at getting desired information. Students also expressed awareness that practical application would be complex in that two lectures could only go so far in terms of making students understand the practical applications of

counselling skills. Thus, while many expressed an increase in confidence in their ability to complete this project, some doubts over application of practical skills remained. The student volunteers seemed to be in agreement that a way to attain progress in this regard was to gain personal experience.

Focus Groups 3 and 4

Student volunteers conducted 2 community visits (Community Visits 2 and 3). After each visit, student volunteers took part in a focus group. In both focus groups, all three student volunteer groups reported on the information they had gathered. It was clear in focus group 3 that students still needed practice in information collection. Student volunteers reported rather general information in the focus group rather than information focused on the target population that they had selected in the previous session. For example, one group that chose to focus on the elderly within the community reported that the getting in touch with the elderly within the community was difficult, the district office had a smaller role in the community than originally thought, and that there were few stray animals within the community. Obtaining general information rather than information that was specific to the target population was a common issue for the other groups as well. From this community visit, none of the groups were

able to gather enough information to construct a comprehensive analysis of the community networks.

Researchers then highlighted the issues and asked student volunteers to brainstorm on how they would solve these issues in their next community visit. Student volunteers proposed solutions involving alternative ways to gather information. For example, in the group mentioned above, members of the group listed that instead of looking solely for elderly members of the community who were outside their homes and available to answer questions, they would gather information about the elderly from people in the community who had elderly family members living with them.

Focus group 4 took place after the student volunteers went on another community visit. After this visit, student volunteers were able to collect the information more effectively. All groups were able to create a list of specific strengths and weaknesses of their chosen network. In comparison to the previous community visit, this focus group showed that student volunteers were more effective at gathering information about their selected network. For example, the group that chose to focus on the community's youth were able to obtain a great deal of information specifically on the problems faced by the youth in the

community. Major problems included safety and drug abuse. This was reported to be a critical issue when parents were away at work. Another group reported that most adults within the community worked in nearby factories for most of the day. This left the elderly who could no longer work to look after themselves for much of the day. Another consequence of this was that, the youth were left with very little supervision. This led to a number of unsupervised youth engaging in risky behaviour. Major strengths reported by all groups were communication within the community, and a strong bond within the community that helped create a culture that facilitated family activities.

Final Focus Group

A major focus of this focus group was on community structure analysis. All three student volunteer groups summarized the information gained from the previous community visits, including the strengths and weaknesses of each target population. Once the networks were put together, all groups achieved a greater understanding of the community structure as a whole. Students could get a big picture view on how the different networks that they collected data on were able to fit together. This allowed them to devise an intervention that tackled problems or potential problems faced by

their chosen community network. For example, students were able to now see how many of the problems that the youth of the community faced were linked to how another group, the adults, lived their lives.

Student volunteers were able to analyse the information that they had gathered in the community visits and from that information, came up with preliminary intervention and promotion of wellness programs. Intervention programs centred on addressing problems currently faced by the Ta Klong community. Promotion of wellness programs focused mainly on building upon strengths of the community in order to increase quality of life for community members. As reported earlier, one major problem was drug abuse among the community youth. The student volunteer group that focused on the community youth drew up an intervention plan involving at risk adolescents in the community. It was reasoned that drug abuse during adolescence can unquestionably hamper an adolescent's opportunity to make a better future for themselves. The intervention plan involved elements of getting help for the addiction. In addition, this group proposed a plan to help promote a better future for these adolescents. This involved helping these adolescents create a structured plan

for the future. The student volunteers argued that the strong community bond that facilitated family activities would help this plan come to fruition. Their proposal included family activities and mentorship geared towards helping adolescents carry out and persist with their plan.

Another student volunteer group drew up a plan that focused on the elderly. Many of the elderly members of the Ta Klong community who were no longer working stayed at home for much of the day. In a working-class community, not contributing to the family earnings was problematic for many households. This group devised a program that focused on various ways for the elderly to earn additional income for the household, such as by setting up vocational training classes for the elderly. This group also attempted to build upon the strong community bond. They planned to set these classes up as a community-wide event that would encourage the elderly to participate.

Final Student Evaluation

Finally, student volunteers evaluated their own learning. Overall, evaluations were overwhelmingly positive. All who completed this project reported that it helped them gain a greater understanding of implementation of counselling skills, and that they gained practical experience about how to utilise these skills. In particular,

student volunteers reported that they were able to enhance their skills in counselling, as well as teamwork and planning. Some of the student volunteers further elaborated on how participation in this project pulled them out of their comfort zone of mostly individual learning in a structured classroom environment, into a complex new setting that required much teamwork and problem-solving skills. For example, one student volunteer reported that due to a lack of practical experience, students faced problems they did not anticipate in Community Visit 2, which made it very important to figure out solutions with group members for Community Visit 3. This in turn allowed them to be better equipped to deal with similar problems in the future.

Additionally, a majority of the student volunteers reported that the community visits allowed them to gain experience working in the community. They achieved a greater understanding of the complexity of the community by doing community structure analysis. Some highlighted the importance of this experience for doing future community work.

One interesting theme from the evaluations was the increased awareness of social gaps. While teaching the students about social gaps was not an original aim of this project, it was astonishing that several

student volunteers included this in their evaluation. A third of students described how the difference in living conditions in the Ta Klong community, in comparison to their own, was a valuable learning experience. For instance, one student expressed that life inside the community was much different from their own, most of which was spent on campus and home, and that these differences helped them understand themselves and their place in society, and in turn helped them gain a greater sense of social responsibility.

Discussion

The results indicate that hypotheses of this project were supported. Student volunteers were able to gain experience in applying their skills to the community. Conducting a community structure analysis allowed them to gain insight into how the community as a whole functioned.

The responses from Focus Group 1 suggest that lectures on counselling skills alone were not enough to allow students to understand how to apply their skills in a practical setting. Although the Introduction to Counselling course did provide the students with some chance to engage in practical role-playing activities, and apply the skill they learned in class, it was within the confines of a classroom. Students would

interact with other students in these activities. While these activities undoubtedly have their merits, students still rated their own knowledge about counselling skills and ability to apply said skills to working in the community as being “very low” or “low”. This was apparent in the student volunteers’ inability to gather much more than general information from their responses from Focus Group 3. This shows that even lectures focused on community psychology in addition to previous classroom learning of counselling skills were not enough for students to effectively apply these skills in a real-life setting. The progress between Focus Groups 3 and 4 suggests that having lectures in addition to experience in a real-life context was very important for student learning. This seems to suggest that community learning can be a beneficial tool for teaching in areas such as counselling psychology.

The findings from this study are in line with previous research in the field. In a study on service-learning, students enrolled in a Public Policy class took part in voluntary community work over a 3-month period (Deeley, 2010). Data obtained from focus groups and interviews suggest that a combination of gaining practical experience in the community, critical reflection, and small group work were the main factors in

the students developing intellectually. Also, community-based activities have been shown to increase confidence as well as counselling efficacy. This is highlighted study by Williams *et al.* (2018) where medical students became more self-confident and learned to communicate with target groups more effectively through providing counselling to low-income families about nutrition. Similarly, the data from our project seem to suggest that learning indeed took place. Through working in the community, engaging in critical reflection, and working in small groups, students in this project were able to use counselling skills learned in class in a real setting to gather information from community members to conduct a community structure analysis. That students were able to collect such information through the use of counselling skills suggests that community learning is a very valuable tool for teaching said skills and should thus be used more often in higher education.

Additionally, even though it was not an aim of this project to teach the students about social inequality, it was apparent that students gained increased awareness of social inequality in Thai society by participating in this project. This process is highlighted by the Social Empathy model, where by gaining an understanding of the conditions and needs of diverse groups, one

is more likely to feel a sense of social responsibility, and in turn promote social justice (Segal, 2011; Segal *et al.*, 2012). Thus, gaining increased contextual understanding of those living in the Ta Klong community, likely helped the students feel more involved and gain a better understanding their responsibility to their society. Indeed, understanding of others' life experiences with relation to their social context has been shown to be linked with involvement in civic engagement (Hylton, 2018). This shows clear implications for teaching social responsibility. By teaching students to have a greater sense of social responsibility, we can shape citizens of the world to take an interest in improving the lives of people in their own and surrounding communities, and accordingly, create a better society for its inhabitants.

This project was conducted as an extracurricular activity and not a part of any class requirement. Therefore, one limitation of this study was that we were unable to assess whether the progress made in this project also translated to progress in the classroom as well. In addition, students had varying class schedules depending on year and graduation requirements, making it difficult to schedule visits to the community. Hence, there were only 3 in total. Due to time constraints we were unable to implement interventions. Time constraints

also meant we were unable to assess counselling skills prior to student volunteers taking part in this project. Despite this, the results from each of the focus groups clearly show learning progress through the greater depth of information gathered by the student volunteers. In order for them to have gathered that information, student volunteers had to have had interactions with the people in the community, where they would have had to apply their counselling skills. Therefore, despite being unable to assess counselling skills prior to the start of the project, the results seem to suggest that counselling skills did improve. Finally, we did not ask for feedback from the community leaders about how the community members felt about the community visits.

This project demonstrates that community learning is a very valuable tool for teaching students to implement counselling skills. As we were unable to assess whether progress translated to better understanding in the classroom environment, further study should focus on whether or not the extent to which community learning provides a greater understanding for concepts learned in lectures, and if so, the extent to which it does. Also, while students can benefit from community learning, further studies should

attempt to make sure that the community feels they have benefitted as well.

Conclusion

The project was conducted to act as an additional platform for student learning. Analyses of the focus groups suggest that community learning allows for students to have a platform to gain experience and apply their counselling skills in the community. This suggests that community learning can be of great benefit to counselling students.

Acknowledgements

The authors would like to thank the district officials working in the Ta Klong community who helped facilitate this project, Dr. Kulvadee from Chiang Mai University for helping conduct the community lectures, and the Faculty of Liberal Arts, Thammasat University, for fully funding of this project.

References

Ball, C.T. and L.E. Pelco. 2006. Teaching research methods to undergraduate psychology students using an active cooperative learning approach. International Journal of Teaching and Learning in Higher Education 17(2): 147-154.

Boud, D., R. Cohen, and J. Sampson. 2013. Peer Learning in Higher Education: Learning From & With Each Other. Routledge, New York.

Deeley, S. 2010. Service-learning: Thinking outside the box. *Active Learning in Higher Education* 11(1): 43-53.

Eyler, J., and D.E. Giles. 1999. Where's the Learning in Service-Learning? *Jossey-Bass Higher and Adult Education Series*. Jossey-Bass, San Francisco.

Goffe, W.L. and D. Kauper. 2014. A survey of principles instructors: Why lecture prevails. *The Journal of Economic Education* 45(4): 360-375.

Hill, S.E. 2014. Helping Skills: Facilitating Exploration, Insight, and Action. 4th ed. American Psychological Association, Washington DC.

Hylton, M.E. 2018. The role of civic literacy and social empathy on rates of civic engagement among university students. *Journal of Higher Education Outreach and Engagement* 22(1): 87-106.

Kyndt, E., E. Raes, B. Lismont, E. Timmers, E. Cascallar, and E. Dochy. 2013. A meta-analysis of the effects of face-to-face cooperative learning: Do recent studies falsify or verify earlier findings? *Educational Research Review* 10: 133-149.

Marullo, S. 1998. Bringing home diversity: A service-learning approach to teaching race and ethnic relations. *Teaching Sociology* 26: 259-275.

Moss, R., and M.V. Glowik. 2013. Therapeutic Alliance and the Helping Relationship. In: D. Capuzzi and D. R. Gross (eds). *Introduction to the Counselling Profession*. 6th ed. Routledge, New York.

O'Brien, K.M., S. Patel, N. Hensler-McGinnis, and J. Kaplan. 2006. Empowering Undergraduate Students to be Agents of Social Change: An Innovative Service Learning Course in Counselling Psychology. pp. 59-73.

Poomontre, J. and P. Setthawong. 2016. An updated prediction system for the TMRS standardized socio-economic status (SES) classification of Bangkok and metropolitan subjects. Paper presented at the First International Conference on Information Technology. Krabi, Thailand.

Prentice, M. and R.M. Garcia. 2000. Service learning: The next generation in education. *Community College Journal of Research and Practice* 24(1): 19-27.

Puncreobutr, V. 2018. Professional and cross-cultural competences of Thai

graduates to work in ASEAN context. Journal of Community Development and Life Quality 2(2): 225-232. (in Thai)

Sadeghi, R., M.M. Sedaghat, and F.S. Ahmadi. 2014. Comparison of the effect of lecture and blended teaching methods on students' learning and satisfaction. Journal of Advances in Medical Education and Professionalism 2(4): 146-150.

Schmidt, H.G., S.L. Wagener, G.A.C.M. Smeets, L.M. Keemink, and H.T. van der Molen. 2015. On the use and misuse of lectures in higher education. Health Professions Education 1: 12-18.

Segal, E.A. 2011. Social empathy: A model built on empathy, contextual understanding, and social responsibility that promotes social justice. Journal of Social Service Research 37(3): 266-277.

Segal, E.A., M.A. Wagaman, and K.E. Gerdes. 2012. Developing the social empathy index: An exploratory factor analysis. Advances in Social Work 13(3): 541-560.

Tlhoaele, E., C. Suhre, and A. Hofman. 2016. Using technology enhanced, cooperative, group-project learning for student comprehension and academic performance. European Journal of Engineering Education 41(3): 263-278.

Wandersman, A. and M. Nation. 1998. Urban neighborhoods and mental health: Psychology's contribution to understanding toxicity, resilience, and interventions. American Psychologist 53(6): 647-656.

Williams, A.S., P.M. Patel, N.L. Beucke, and R.J. Koopman. 2018. Community-based medical student nutrition counseling training for low-income families. Primer 2(5).