

Effect of Teachers' Health Behaviors on Students' Health; A Social Cognitive Viewpoint of Role-Modeling

Bhagwan Aryal

bhagwanaryal2035@gmail.com

Lecturer, Central Department of Education, T.U., Kirtipur

ORCID: 0000-0002-9215-3551

Abstract

Teachers as role models teach and set an example through their actions. Students routinely observe and are directly influenced by the teacher's health behavior. Unfortunately, school teachers are vulnerable to many health issues that affect student success. Teachers are often absent, showing examples of poor health. This study sought information on the impact of teachers' health behaviors on student health from a cross-sectional descriptive study of mixed methods in secondary schools of Bagmati Province, Nepal. The total sample size of the students in the quantitative interview was 412 from 46 randomly selected schools in the Rasuwa, Bhaktapur, and Chitwan districts. Another 30 students from different schools were selected for in-depth study. It focused on finding out how students identify teachers as role models. Since the concept of role models appears in Albert Bandura's social learning/cognitive theory, which focuses on cognitive concepts, this study examined student cognition to connect to the role modeling structure of the theory. This theory focuses on how children and adults cognitively process social experiences and how these cognitions affect behavior and development. In the light of this theory, it was explained the effect of teacher health behaviors on student's health. Observable health behaviors of teachers are proved to have positive and negative impacts on students' health.

Keywords: Health behavior, role model, social cognitive theory, teacher's health, Nepal

Introduction

I am a teacher. I teach health education at the university level. Earlier, I used to teach at some schools in Kathmandu. Being a Health Education teacher at secondary schools in Kathmandu from 2059 BS to 2067 BS, I saw most of the teachers facing abundant physical and psychological problems due to workload and stress at school. The situation sometimes used to become too repulsive when the students started teasing their teachers for their poor body structure and sluggishness. Most of them were either too obese or lean and thin. Besides, the school administration was also facing the problem of teachers' absenteeism.

The role models of thousands of students; the teachers' activities were not else supportive of the wellness perspective. However, the teachers blamed the tough daily routine at school and demanded a reduction of class hours for the prevention of mental stress. They too demanded

tiffin, safe water, and sanitary latrines at school for their welfare. In addition, when I used to request my students to follow certain health behaviors (e.g., washing hands after toilet and before tiffin, not biting nails, drinking sufficient water, etc.), many of them used to say ok at the front, but I also used to get handy answers from them that they had likewise seen teachers who were not following healthy behaviors.

On the other hand, I was though health literate was also being frequently absent from school due to illnesses. When the courses were not accomplished on time, I used to call the students on holidays to take extra classes. The students were not very pleased to come to the school on holiday. Students' lack of interest and speedy lectures made the classes boring. The students used to learn little and were seen as stressed. This all used to happen of my absenteeism on the teaching days. All this made me realize that my health status and behaviors as a teacher were affecting the students' health and learning on the other side.

It is indispensable that one of the most valuable workforces in any nation is the one that nurtures and substantially shapes each generation (Kolbe, Tirozzi, Marx, Bobbitt-Cooke, Riedel & Jones, 2005, p. 158). This workforce, often the largest, includes school teachers. These teachers are role models for students who are in contact for about 6-8 hours each day. Students usually observe and are directly influenced by the teacher's health behavior. Unfortunately, I have observed that many school teachers are susceptible to many health problems that hinder student success. Teachers are often absent, showing examples of poor health.

I believe that teachers' observable health behaviors influence the minds of students. Students learn and even follow what they see. The role of visuals in communication is so strong that the students learn and gain the maximum experiences of all. Although the oral method is used widely by teachers to instill behaviors, it is necessary to use the most effective method to establish communication in the classroom.

Generally, role models are understood to be other persons who, either by exerting some influence or simply by being admirable in one or more ways, have an impact on another (Nauta & Kokaly, 2001 as cited in Schroeter, 2002). A role model can give a person an idea of how they would like to be. It would probably be based on some dissatisfaction with an aspect of oneself, and the role model would provide a way of 'turning around' the person's thinking so that they can say "I've got to be more like X and feel positive about it".

Since teachers are community leaders who play an important and influential role in improving the status of the nation's health as a whole (Cox & Billingsley, 1996), it is necessary to know how Nepalese teachers' health behaviors affect their student's health and how students take their teachers in terms of role models.

Materials and Methods

Cross-sectional survey research using a mixed-method approach (Creswell, 2013) was used to explore the effect of teachers' health behaviors on students' health and how the students perceive

their teachers' health in terms of role models. This included interviews with students from the same school where teachers were surveyed with a questionnaire. Health role modeling can be related to all levels of teachers and students but this research was delimited to the secondary level students and teachers. A multistage method of sampling was used in the selection of the province (Bagmati), districts (Rasuwa, Bhaktapur, and Chitwan), schools, and students. A proportionate simple random sampling procedure was purposively followed to select 46 schools from the list of three districts.

The students' sample was obtained based on proportionate sampling at the schools. It happened by including 5-18 students conveniently (based on their availability at the time of interview) from each school to reach the required sample size. The final sample size was reached slightly more than the proposed sample size because I had to respect the interest of some students in the schools who showed a strong wish to be part of the research process. The total sample size of students at the end of the data collection reached 412 from 46 schools. For qualitative data, 30 students from different schools were selected from different schools based on a short interview to assess whether their changes in health behavior followed the teacher's engagement.

Table 1. *Population and sample size of the students and schools*

Districts	Teachers				Schools			
	Total	% of total	Proportionate sample size	Final sample size	Total	% of total	Proportionate sample size	Final sample size
Rasuwa (Mountain)	1437	4	15	27	15	4.5	2	4
Bhaktapur (Hill)	22551	63.1	240	245	154	46.4	20	20
Chitwan (Terai)	11747	32.9	125	140	163	49.1	22	22
Total	35735	100	380	412	332	100	44	46

Interview schedules and in-depth interview guidelines for students (of grades Nine and Ten) were used as the tools. The interview was used among the students to draw together information on their perceptions of the health of their teachers. This included the questions to find their prospect on what they felt and how they related their teachers' health to their health. Quantitative data were analyzed using descriptive statistics including averages and cross-tabulations. The in-depth interviews were recorded and thematically analyzed. The researcher reviewed and explored the information by reading them frequently, creating initial codes, and making notes (Given [Ed.], 2008), which were again revised and combined into themes based on the literature review, word repetition, and keywords of the context (Ryan and Bernard, n.d.). Relevant quotes were presented to maintain the themes without any personal influence from the researcher. Interpretations were made in an analytic and interpretative way. Ethical approval was obtained from the Research Committee of the Dean's Office, Faculty of Education, Tribhuvan University.

Results

Observation of the Teachers' Health Behaviors

Every teacher possesses a certain level of health. It determines their everyday behavior. Teachers' health behaviors play a role model effect on students' health because students usually observe their teachers' behaviors. In this context, Kolbe et al. (2005) cited the statement of the Centers for Disease Control and Prevention (2003) as follows: 'healthy, optimistic faculty and staff are critical to affecting student well-being and academic achievement' (p. 158). Students also know about their teacher's health behaviors that create an image of a role model in their minds. In this regard, the students were asked to state the known or identified unhealthy behaviors of their teachers. The students were left to decide which behavior was healthy and which was unhealthy. Several varieties of responses were found as follows:

Table 2. *Behaviors of the teachers identified as unhealthy by the students*

Teachers' unhealthy behaviors	Responses		Percent of Cases
	N	%	
Laziness (Inactive)	101	17.6	33.6
Attending school in illness	84	14.6	27.9
Smoking	54	9.4	17.9
Alcohol consuming	51	8.9	16.9
Tobacco chewing	50	8.7	16.6
Hostile/being angry	50	8.7	16.6
Giving punishments/misconducting	30	5.2	10.0
Chewing <i>paan</i> , nut, <i>pukar</i>	27	4.7	9.0
Wiping nasal discharge with hands/not using a hanky	17	3.0	5.6
Feeling unhappy	15	2.6	5.0
Spitting	15	2.6	5.0
Poking nose	10	1.7	3.3
Worried	10	1.7	3.3
Poor body posture	9	1.6	3.0
Unclean clothing	9	1.6	3.0
Poor personal cleanliness	7	1.2	2.3
Loudly speaking	5	0.9	1.7
Burping	5	0.9	1.7
Not taking rest	5	0.9	1.7
Drug abuse	4	0.7	1.3
Consuming street foods	4	0.7	1.3
Not adaptable to students	3	0.5	1.0
Malnutrition	2	0.3	0.7
Itching	2	0.3	0.7
Not brushing teeth	1	0.2	0.3
Producing dirt, wastes	1	0.2	0.3
Eating without washing hands	1	0.2	0.3
Drinking dirty water	1	0.2	0.3
Proud feeling	1	0.2	0.3
Total	574	100.0	190.7

*Multiple responses

As per table 2, about 34 percent of students took the inactivity of their teachers as the major unhealthy behavior. This indicates that Nepalese teachers are demonstrating a sedentary lifestyle. Similarly, about 28 percent of students identified attending school during illness as an unhealthy behavior of teachers. It shows students were aware of illness behavior. They understood that one has to take rest during illness. This also depicts a critical state of teachers' illness and their restraint to attend jobs during illness as they are not provided with sufficient sick leaves.

About 18 percent of students reported smoking; about 17 percent reported alcohol-consuming; 16.6 percent tobacco chewing; 9 percent chewing *paan*, nut, or *pukar*; and 1.3 percent drug abuse behaviors of teachers as identified unhealthy behaviors. It shows that a total of 61.7 percent of students knew about any of the forms of substance abuse behavior by their teachers.

Students described some unhealthy emotional/mental health behaviors of their teachers too. As 16.6 percent of students indicated hostility/being angry without reason as one of the most occurring cases of unhealthy emotional behavior. This category included feeling unhappy (5%), worried (3.3%), and feeling proud (0.3%).

Furthermore, students identified some exemplary unhealthy social behaviors of their teachers. Misconduct (10%), loudly speaking (1.7%), burping (1.7%), and being non-adaptive to students (1%) were some of the examples.

Problems due to Teachers' Health Behaviors

After identifying the unhealthy behaviors of the teachers, it was important to know how the teachers' health behaviors affected the students' health. A total of 11.2 percent of students reported some sort of problem felt due to the presence of teachers with unhealthy behaviors in schools. A qualitative study also revealed that students face problems when their teachers bear unhealthy behaviors. Several students perceived that the ill health or unhealthy habits of the teachers cause health and learning problems to them. Those students who perceived the problems categorized the problems into the following types:

Table 3. *Type of problems faced by the students due to the teachers' illness in school*

Problems	Frequency	Percent	Valid Percent
Transfer of communicable disease	17	4.1	43.6
Difficult feeling due to smell of tobacco	6	1.5	15.4
Physical problems	6	1.5	15.4
Inactiveness (Laziness)	4	1.0	10.3
Difficulty in breathing in his/her presence	3	0.7	7.7
Mental tension	2	0.5	5.1
Difficult feeling due to smell of alcohol	1	0.2	2.6
Total	39	9.5	100.0
Missing or Not facing any problem	373	90.5	
Total	412	100.0	

Table 3 shows that 39 students reported some form of health-related problems they faced in the classrooms due to the teachers' illnesses. All the unhealthy behaviors of teachers were not given much attention by the students. Students mostly became indifferent to this issue. However, among those who faced the problem, the 'transfer of communicable diseases like the common cold, cough, itching, etc. was the largest one. A total of 17 students (43.6%) reported this. It was followed by 'difficulty feeling due to the smell of tobacco' (15.4%) and physical problems (15.4%).

This shows that students knew about the unhealthier acts of their teachers (574 cases reported) but they became habitual of that and took that as normal. Only some of the students (39 cases) perceived severe problems or threats to their health due to their teachers' unhealthier behaviors in school and the classroom.

Students' observations, views, and perceptions are also important sources to analyze teachers' health behaviours for role-modeling. In this issue, one of the students revealed that their teacher represents alcoholism behavior in the classroom. She said:

"I feel our teacher is truly a drunkard and he stinks most of the time. When his class begins, it turns out that the period is very long. Then he approaches us and we hold our breath to avoid his stink. He often teaches when he's not drunk, but he's usually drunk." (A grade 9 girl, Rasuwa, in-depth interview).

Similar cases of alcoholic teachers were found in the other two districts as well. Smoking was found as another habit of the teachers that caused discomfort to the students to dealing with such teachers. One of the boy students in Chitwan revealed that he lacked the confidence to dialogue with such teachers who have unhealthy habits of taking any substance.

Dealing with Healthy Teachers

An important principle of Bandura's social cognitive theory is that exposure to positive role models can alter students' attitudes (Santrock, 2006). The student sees the world with the teacher's eyes if the teacher carefully creates the opportunity for observational learning. It happens when a teacher makes a student comfortable to deal with. In a question, most of the students affirmed that they would feel better while they deal with healthy teachers. It was reported by 12.6 percent of students that they found no difference in dealing with healthy or unhealthy teachers but a total of 87.4 percent of students felt it good dealing with healthy teachers. Feeling good to see somebody is necessary for mental health promotion. If the presence of healthy teachers gives this happiness to the students, teachers must act healthy.

The perceptions of the students regarding the reasons for feeling better while dealing with healthy teachers were further identified as follows:

Table 4. Reasons for feeling better while dealing with healthy teachers

Reasons	Responses		Percent of Cases
	N	%	
Better teaching/long-lasting instruction/interesting instruction	141	33.3	39.8
Comfort feeling on contacting healthy teachers	66	15.6	18.6
Healthy teachers explain health	38	9.0	10.7
Healthy teachers encourage students to be healthy	36	8.5	10.2
Healthy teachers have good conduct/behavior	32	7.5	9.0
Learning new things	30	7.1	8.5
No threat of disease transfer	21	5.0	5.9
Healthy teachers have attractive personality	21	5.0	5.9
Healthy teachers provide effective advice	18	4.2	5.1
Healthy teachers understand student's problems	16	3.8	4.5
Students are involved in activities	5	1.2	1.4
Total	424	100.0	119.8

*Multiple responses

According to table 4, about 40 percent of students felt better while dealing with healthy teachers for the sake of their better teaching-learning activities. Next 18.6 percent felt comfortable contacting/interacting with such teachers. Some other students liked such teachers because they explained health (10.7%) and encouraged them to be healthy (10.2%). Nine percent of students believed that healthy teachers had good manners or conduct.

A student from Rasuwa in an in-depth study mentioned that he liked one of his healthy teachers because he had a good personality. Similarly, another student from Chitwan said:

"My English teacher is the best one. He teaches well. He never shows pride in being the best teacher. I've not noticed him being absent from school due to illness. He is healthy, friendly, and cooperative. I understand his teaching." (A grade 9 boy, Chitwan, in-depth study).

Another student from Bhaktapur described as follows:

"For me, the optional mathematics teacher is a role model. I have changed myself a lot after seeing him. I used to be ill and study poorly earlier. But his health, good manner, and guidance changed me. He pays attention to all the students. I have learned from him that we should take care of our bodies. I have started exercising in the morning too. I have improved a lot in my health." (A grade 10 girl, Bhaktapur, in-depth interview).

In addition, students closely watched what their teachers do. Healthy behaviors of the teachers such as keeping oneself and surrounding clean were also quickly becoming the role models act for some students.

The Health Education teacher in my school is a role model for me. Though our school lacks even first aid materials, the teacher is very healthy, and conscious and provides us with useful health-related information. He is a role model because he picks the waste from the ground. This inspires us. I believe one must be healthy first to teach well like my health education teacher. (Chhetri boy, grade 10, Chitwan, in-depth interview)

Analyzing the students' narratives, the students did not identify a teacher in a particular subject as a role model, but dealing with a healthy teacher was comfortable for them. Some of them were even recognized as role models. There were teachers in all subjects as role models for various students. This may be due to the teachers treating the students differently or the students' perceptions of each teacher being different. However, healthy and friendly teachers were considered role models because the students felt comfortable dealing with them.

Discussion

A total of 574 cases of ill health or unhealthy behaviors of the teachers were detected by the students including sedentary behavior, attending school even during illness, smoking, and alcohol consuming habits. In total, 61.7 percent of students knew about any of the forms of substance abuse behavior by their teachers. There was a threat that these students could learn negative behaviors from their teachers because they used to observe them. If teachers set themselves as role models for health, students will learn to follow them as examples. I had an assumption that healthy teachers produce healthy and wise students because students do what they see.

Sampath, Panneerselvam, and Santhanam (2007) showed the following figures in the context of learning by the students: we learn, 1% through taste, 1.5% through touch, 3.5% through smell, 11% through hearing, and 83% through sight. The above figure identifies the superiority of 'sight' as more than 80% of the experiences we gain in this world are received through this particular sense. Health persuasion is one of the four strategies for health promotion as per Beattie's health promotion model (Naidoo & Wills, 2009). The provision of knowledge needs to be complemented by persuasive techniques aimed at inducing attitude changes before the target engages in proper practice (Green & Tones, 2010). Persuasion works by appealing to a limited set of rooted human impulses and needs that drive people to change (Echols, 2017). Teachers as role models persuade and teach by their actions, and they set an example to change. However, a chance of change is only possible if a teacher persuades their student in modifying health behaviors first after changing themselves.

Concerning trying to achieve change, role models set the tone 'we must become the change we want to see'. Robbins (2003) says that much of what we have learned comes from watching models- parents, teachers, peers, motion picture and television performers, bosses, and so forth (p. 46). This view that we can learn through both observation and direct experience has been called Social Learning Theory (SLT) (Bandura, 1977 a).

The theoretical underpinning for role models is social learning theory. According to this theory, people learn behavior by observing it in others and repeating it if it appears beneficial to them (Schroeter, 2002). Albert Bandura, a social cognitive theorist, propounds that people can learn by observing the behavior of others. Aronson, Wilson, and Akert (1997) say that children have never been good at listening to their elders, but they have always been successful to imitate them. Individuals can also learn by observing what happens to other people and just by being told something, as well as by direct experience.

Imitation plays an important role in the acquisition of deviant as well as conforming behavior (Bandura, 1986). New responses may be learned or the characteristics of existing response hierarchies may be changed as a function of observing the behavior of others. The earliest information available to children regarding what it means to be female or male comes from their parents (Perry, 1992). Parents are the first role models for children. During childish games, it is observed that children imitate and behave as per their parents. Afterward, the teacher in the school can set themselves as role model and impact students' behavior through their deeds.

According to Social Cognitive Theory, behavioral change is made possible by a personal sense of control. If people believe that they can take action to solve a problem instrumentally, they become more inclined to do so and feel more committed to the decision. People who believe that they can cause events may lead more active and self-determined lives. Self-efficacy has come to be widely regarded as a mediator of treatment for a variety of outcomes including phobic behavior, smoking cessation, use of HIV prevention strategies, and improved health. According to Bandura (1997 b), treatment is successful when it creates expectations that a person's actions in a particular setting can be effective.

This theory provides an insight for understanding the stand of role modeling by a teacher during observational learning by a student. The theoretical closing of this review is that social modeling is not simply response mimicry; rather, students similarly generate new behavior patterns by going beyond what they have seen or heard. In addition to cultivating new competencies, social modeling affects motivation by instilling behavioral outcome expectations or measures of self-efficacy.

In this study, the students also raised some issues of unhealthy behaviors of the teachers in school including the transfer of communicable diseases and foul-smelling. Although the students were not found to face abundant health problems due to the presence of teachers with unhealthy habits in schools, they preferred teachers with healthy habits. Almost all students felt good dealing with a healthy teacher. Students usually did not consider teachers in a particular subject to be role models, but interacting with healthy teachers was always stress-free.

A study shows that the awareness of health, a positive attitude towards health, non-smoking, and regular exercise by teachers are positively correlated with a student's healthy eating habits (daily eating breakfast, vegetables, and dairy products) and are negatively correlated with unhealthy behavior (daily intake of fried and sugary foods) (He, et.al, 2014). Physically and mentally healthy teachers are likely to be energetic, enthusiastic, and effective and serve as excellent role

models for the students. Children mainly learn through the examples given to them. Therefore, many parents want a positive and healthy role model at school. Students can mimic these behaviors when faculty and staff work to achieve a high level of well-being (Cox & Billingsley, 1996). Santrock (2006) states: "Children can stick to the model and remember what they see, but they cannot reproduce the model's behavior due to limited athletic performance" (p.228). However, this only happens after the student observes the teacher's behavior. Additionally, teachers can influence the students thru role-modeling (Schultz, 2013) by making them learn lessons from the teacher's errors and keep away from repeating the mistakes.

Conclusions and Implications

An important idea in this study was that teachers' observable health behaviors could have both positive and negative effects on student health. Students always want a healthy teacher at school. Although not directly opposed to the existence of unhealthy teachers, they understood and believed that healthy teachers taught well and felt good. They also liked such teachers because they taught them better and informed them that they were healthy. This quality and motivation of education were lacking in the presence of unhealthy teachers. This indicates that the presence of a healthy teacher can affect the health of the student.

Students will benefit if teachers are more energetic and less absent. They stay longer and the general school climate is more optimistic. On the other hand, if teachers perceive that they have bad habits, they cannot convince the students to improve their health. Therefore, teachers need to set up examples of healthy habits to persuade.

Imitation can be a powerful social learning tool. Role models provide a rich tapestry that interweaves important behavioral patterns throughout life. Therefore, all teachers are expected to show a high standard of health and hygiene and teach their students kindly and effectively to become role models. Health must be an integral part of teacher values and practice of daily life. Students are well taught by healthy teachers and are easy to handle, so they must always show healthy behavior. According to the social cognitive theory of how children's observational learning is done, teachers' health habits can be learned by students. Therefore, schools and teachers need to create a supportive environment in which teachers can practice healthy habits and present positive role models in front of students.

References

- Aronson, E., Wilson, T. D., & Akert, R. M. (1997). *Social psychology*. New York: Addison Wesley Educational Publishers.
- Bandura, A. (1977). *Social learning theory*. Upper Saddle River, NJ: Prentice Hall.
- Bandura, A. (1986). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1997 a). *Social learning theory*. New York: General learning press. <http://tip.Psychology.org/bandura.html>.

- Bandura, A. (1997 b). Self efficacy toward a unifying theory of behavioral change. *Psychological Review*, 84, p. 191-215.
- Cox, C. C., & Billingsley, J. (1996). Rationale for schoolsite health promotion. *Education*, 116 (4). <https://go.gale.com/ps/i.do?id=GALE%7CA18631286&sid=googleS&v=2.1&it=r&linkaccess=abs&issn=00131172&p=AONE&sw=w&userGroupName=anon%7E1050e96f>
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative and mixed methods approaches*. New Delhi: SAGE Publication.
- Echols, J. (2017). *Beyond engagement; strategies for persuasion and influence*. https://www.worldhealthcarecongress.com/PDF/Carenet_Persuasion.pdf
- Given, L. M. (Ed.). (2008). *The Sage encyclopedia of qualitative research methods*. Sage Publications.
- Green, J., & Tones, K. (2010). *Health promotion: Planning and strategies* (2nd ed.). London: SAGE Publications Ltd.
- He, L., Zhai, Y., Engelgau, M., Li, W., Qian, H., Si, X., Gao, X., Sereny, M., Liang, J., Zhu, X., & Shi, X. (2014). Association of children's eating behaviors with parental education, and teachers' health awareness, attitudes and behaviors: a national school-based survey in China. *European Journal of Public Health*, 24(6), p. 880–887, <https://doi.org/10.1093/eurpub/ckt177>
- Kolbe, L. J., Tirozzi, G. N., Marx, E., Bobbitt-Cooke, M., Riedel, S., Jones, J., et al. (2005). Health programs for school employees: improving quality of life, health and productivity. *Promotion and Education* 12(3-4), p. 157-161.
- Naidoo, J., & Wills, J. (2009). *Foundations for health promotion* (3rd ed.). Edinburgh: Elsevier Limited.
- Perry, L. A. M. (1992). *Constructing and reconstructing gender. The links among communication, language and gender*. Albany, NY: State University of New York Press.
- Robbins, S. P. (2003). *Organizational behavior*. Delhi: Pearson Education Inc.
- Ryan, G. W., & Bernard, H. R. (n.d.). *Techniques to identify themes in qualitative data*. http://www.analytictech.com/mb870/readings/ryan-bernard_techniques_to_identify_themes_in.htm
- Sampath, K., Panneeselevam, A., & Santhanam, S. (2007). *Introduction to educational technology*. New Delhi: Sterling Publishers Pvt Ltd.
- Santrock, J. W. (2006). *Educational psychology: Classroom update: preparing PRAXIS™ and practice* (2nd ed.). New Delhi: Tata McGraw-Hill.

Schroeter, J. (2002). *The Ally McBeal in us: The importance of role models in identity formation*.
<http://www.theory.org.uk/ally.htm>bio.

Schultz, E. D. (2013). Modeling and role-modeling. In S. J. Peterson, & T. S. Bredow, *Middle range theories: Application to nursing research*. p. 173-192. Philadelphia: Wolters Kluwer Health / Lippincott Williams & Wilkins.