

Psychology 105 Homework

Students,

Hope all is going well with you and your family. I hope you're not too bored yet. I'm certainly looking forward to being back to our regular class discussions again!

For Psychology 105 the homework assignments for these two weeks are from your textbook. I thought it might be a good idea during this stressful, unusual time to pick a chapter that could be useful to you. Chapter 14 is entitled Health Psychology and may be of some use, as there is a lot to be said about the connection between our mind and our body. Our attitude, lifestyle, the way we interact with each other all play a crucial role in the health of our mind, and consequently, the health of our body. Thinking positive, reducing stress, finding motivation to do something creative or impressive is all good for the health of your body and even your immune system!

Again, and you know the routine, I want you to **read** and **summarize** the information. You won't have to high light this time, but I do want you to **reflect** a little on what you've read. That is, does it make sense, do you feel that you can relate somewhat to some of this, how so? Try to give me a little personal reflection on the topics that speaks to you! Also, make sure you organize the summary in a way that I can tell what section you're summarizing or reflecting on. You'll get more points this way! When you get back I might give you an open note test on what you've read, and you'll be able to use your notes! Be organized, and again put things as much as possible into your own words!

Thanks, Mr. Larivee

14

Health Psychology

Is It a Disease or Just Gas?

Imagine that you are a parent of a 1-month-old infant. Your baby's life generally involves eating, sleeping, pooping, and crying. You are tired all the time: Your infant must be fed every two to four hours, even through the night. Days and nights blur together, and you are simply exhausted. You notice that your baby, who is gaining weight and developing normally, has started to spit up a lot, especially after eating, and sometimes quite suddenly, all over your clothes. After spitting up, the baby cries and is fussy. You worry that this frequent spitting up is a serious problem and take the baby to a doctor.

A study by Laura Scherer and colleagues (2013) posed this scenario to parents while they waited for appointments with a pediatrician. For half, the scenario stated that the doctor diagnosed the baby with a disease called GERD (for gastrointestinal reflux disease). For the other half, the doctor never mentioned this label. The parents were asked whether they would seek medication for their child. Compared to those who were not given a disease label, parents who imagined their baby being diagnosed with GERD rated themselves as strongly interested in medication for the problem, even when they had been told the medication was not effective. When the infant's problems were labeled as a disease, the parents wanted a medicine, even one that would not work.

GERD is a real diagnosis, but experts are concerned that it is overdiagnosed and overmedicated. This study shows us what happens when physical symptoms are labeled as diseases, and how psychological factors can influence the health-related decisions.

Decision making is a psychological process even when it involves choices about medical treatments or between unhealthy and healthy behaviors. Indeed, physical health is influenced by contexts, behaviors, motivations, thoughts, and feelings—in other words, by factors at the very heart of the science of psychology.





The focus of this chapter is health psychology, the field devoted to promoting healthy practices and understanding the psychological processes that underlie health and illness. After first defining the field, we examine the ways psychologists explain the process of making healthy life changes and the resources on which individuals can draw to achieve positive change. Next we survey the psychology of stress and coping and consider psychological perspectives on making wise choices in four vital areas: physical activity, diet, the decision to smoke or not to smoke, and sex. Fittingly, the chapter closes with a look at psychology's role in shaping a good life.



Health Psychology and Behavioral Medicine

health psychology

A subfield of psychology that emphasizes psychology's role in establishing and maintaining health and preventing and treating illness.

Health psychology emphasizes psychology's role in establishing and maintaining health and preventing and treating illness. Health psychology reflects the belief that lifestyle choices, behaviors, and psychological characteristics can play important roles in health (Hwang, Moser, & Dracup, 2014; Oh & Taylor, 2014). A related discipline, **behavioral medicine**, is an interdisciplinary field that focuses on developing and integrating behavioral and biomedical knowledge to promote health and reduce illness (Hall, Lowe, & Vincent, 2014; Hou & Lam, 2014). The concerns of health psychology and behavioral medicine overlap: Health psychology primarily focuses on behavioral, social, and cognitive factors (Martire & Franks, 2014; Tran & others, 2014), whereas behavioral medicine centers on behavioral, social, and biomedical factors (Sheehan & others, 2014; Sin & DiMatteo, 2014).

Related to health psychology and behavioral medicine are the fields of health promotion and public health (Bush & others, 2014; Dietz, 2015; Hunter, Rushmer, & Best, 2014). *Health promotion* involves helping people change their lifestyle to optimize their health and assisting them in achieving balance in physical, emotional, social, spiritual, and intellectual health and wellness. Health promotion can be a goal of a company's human resources department, as well as state and city health departments, and it is sometimes a specialty for social workers and other members of the helping professions (O'Donnell, 2014). *Public health* is concerned with studying health and disease in large populations to guide policymakers (Casteñeda & others, 2015). Public health experts identify public health concerns, set priorities, and design interventions for health promotion. An important goal of public health is to ensure that all populations have access to cost-effective healthcare and health promotion services (Carmona & others, 2014; Whelan & others, 2014).

A job in health promotion or public health can involve creating attention-grabbing public service advertisements and brochures to alert the public to health-related issues. If you have seen one of thetruth.com's antismoking ads on TV or noticed a "Click It or Ticket" sign on a highway, you have a good feel for what health promotion and public health are all about.

behavioral medicine

An interdisciplinary field that focuses on developing and integrating behavioral and biomedical knowledge to promote health and reduce illness; overlaps with and is sometimes indistinguishable from health psychology.

The Biopsychosocial Model

The interests of health psychologists and behavioral medicine researchers are broad (Curtis, Groarke, & Sullivan, 2014; Kretchy, Owusu-Daaku, & Danquah, 2014). The

biopsychosocial model in the context of psychological disorders applies to health psychology as well, because health psychology integrates biological, psychological, and social factors in health (Kunz & others, 2014; Pertl & others, 2014).

For example, stress is a focal point of study across the broad field of psychology (Hemmingsson, 2014; Lovallo, 2015). Study of the brain and behavior, for instance, acknowledges the impact of stress on the autonomic nervous system. Furthermore, an individual's state of consciousness, as well as his or her process of thinking about events in particular ways, can influence the experience of stress. Stressful events also affect our emotions, which are themselves psychological and physical events. Aspects of our personalities, too, may be associated with stress and can influence our health. Finally, social contexts can shape both an individual's experience of stress and his or her ability to cope with it.

Connections Between Mind and Body

From the biopsychosocial perspective, the many diverse aspects of each human being are tightly intertwined. Our bodies and minds are deeply connected. After suffering a heart attack, one health psychologist ruefully noted that none of his colleagues in the field had thought to ask him whether heart disease was part of his family history, ignoring the obvious question that a medical doctor would ask first. Although the mind is responsible for much of what happens in the body, it is not the only factor. Even as we consider the many ways that psychological processes contribute to health and disease, we must understand that sometimes illness happens for other reasons—affecting even those who have led healthy lives.

While it might be fascinating to think about how the mind may influence bodily health, it is also important to appreciate that the body may influence the mind as well. Health psychology and behavioral medicine are concerned not only with how psychological states influence health, but also with how health and illness may influence the person's psychological experience, including cognitive abilities, stress, and coping (Dedert & others, 2012; Lutwak & Dill, 2012). A person who is feeling psychologically run-down may not realize that the level of fatigue is the beginning stage of an illness. In turn, being physically healthy can be a source of psychological wellness.

self-quiz

1. Health psychologists believe that _____ are the key factors in health.
A. psychological characteristics
B. lifestyles
C. behaviors
D. all of the above
2. According to the text, health psychology overlaps in significant ways with
A. philosophy.
B. behavioral medicine.
C. neuroscience.
D. behaviorism.

3. The experience of stress can depend on
A. one's state of consciousness.
B. one's personality.
C. one's social situation.
D. all of the above

APPLY IT! 4. Anastasia is committed to getting all A's this semester. In her pursuit of academic excellence, she decides to sleep only three hours a night, to drink a lot of coffee, and to stop wasting time at the gym. She studies nearly 12 hours every night.

During finals week, Anastasia is so exhausted that she sleeps through one of her exams and fails another because she cannot concentrate. Which of the following best explains what happened?

- A. Anastasia probably didn't study as hard as she claimed.
- B. Anastasia forgot that the body can affect the functioning of the mind.
- C. Anastasia took too many hard classes this semester.
- D. Anastasia set her goals too high.

2 Making Positive Life Changes

One of health psychology's missions is to help individuals identify and implement ways they can effectively change their behaviors for the better (Denford & others, 2014; Marquez & others, 2014). **Health behaviors**—practices that have an impact on physical well-being—include adopting a healthy approach to stress, exercising, eating right, brushing one's teeth, performing breast and testicular exams, not smoking, drinking in moderation (or not at all), and practicing safe sex. Before exploring what health psychologists have learned about the best ways to make healthy behavioral changes, we first focus on the process of change itself.

health behaviors
Practices that have an impact on physical well-being.

Theoretical Models of Change

In many instances, changing behaviors begins by changing attitudes. Psychologists have sought to understand how changing attitudes can lead to behavioral changes.

A number of theoretical models have addressed the factors that likely play roles in effective health behavior changes. The **theory of reasoned action** is one powerful approach to this issue. The theory suggests that effective change requires three important things (Ajzen, 2012a, 2012b; Ajzen & Albarracin, 2007; Ajzen & Fishbein, 1980, 2005):

theory of reasoned action

Theoretical model stating that effective change requires individuals to have specific intentions about their behaviors, as well as positive attitudes about a new behavior, and to perceive that their social group looks positively on the new behavior as well.

- specific intentions about the behavioral change
- positive attitude about the new behavior
- belief that one's social group looks upon the new behavior favorably.

If, for example, you smoke and want to quit smoking, you will be more successful if you devise an explicit intention of quitting, feel good about it, and believe that your friends support you. Icek Ajzen (pronounced "I-zen") modified the theory of reasoned action to include the fact that not all of our behaviors are under our control. The **theory of planned behavior** includes the three basic ideas of the theory of reasoned action but adds a fourth: The person's perceptions of control over the outcome (Ajzen, 2002, 2012a, 2012b).

The theory of reasoned action and its extension, the theory of planned behavior, have accurately predicted whether individuals successfully enact healthy behaviors (Ajzen & Manstead, 2007), including cancer screening (Ross & others, 2007), HIV prevention (Kalichman, 2007), prevention of smoking and marijuana use in adolescents and binge drinking in college students (Elliott & Ainsworth, 2012; Lac & others, 2009), cocaine users (Booth & others, 2014), exercise (Plotnikoff & others, 2011), healthy eating (Hackman & Knowlden, 2014; White & others, 2012), children's snack food consumption (Branscum & Sharma, 2013), self-medication with over-the-counter painkillers (Pineles & Parente, 2013), cyberbullying in adolescents (Heirman & Walrave, 2012) and avoidance of gambling on the part of college students (Lee, 2012).

theory of planned behavior

Theoretical model that includes the basic ideas of the theory of reasoned action but adds the person's perceptions of control over the outcome.

The Stages of Change Model

The **stages of change model** describes the process by which individuals give up bad habits and adopt healthier lifestyles. The model breaks down behavioral changes into five steps, recognizing that real change does not occur overnight with one monumental decision, even if that night is New Year's Eve (Norcross, Krebs, & Prochaska, 2011; Prochaska, DiClemente, & Norcross, 1992; Prochaska,

stages of change model

Theoretical model describing a five-step process by which individuals give up bad habits and adopt healthier lifestyles.



As we will see later, perceiving that one has control can have important implications for a number of life domains.



Have you made a healthy life change recently? As we go over these stages, ask yourself whether they apply to your experience.

Stage	Description	Example
1 Precontemplation	Individuals are not yet ready to think about changing and may not be aware that they have a problem that needs to be changed.	Overweight individuals are not aware that they have a weight problem.
2 Contemplation	Individuals acknowledge that they have a problem but may not yet be ready to change.	Overweight individuals know they have a weight problem but aren't yet sure they want to commit to losing weight.
3 Preparation/ Determination	Individuals are preparing to take action.	Overweight individuals explore options they can pursue in losing weight.
4 Action/Willpower	Individuals commit to making a behavioral change and enact a plan.	Overweight individuals begin a diet and start an exercise program.
5 Maintenance	Individuals are successful in continuing their behavior change over time.	Overweight individuals are able to stick with their diet and exercise regimens for 6 months.

FIGURE 1

Stages of Change Model Applied to Losing Weight The stages of change model has been applied to many different health behaviors, including losing weight.

Norcross, & DiClemente, 1994) (Figure 1). Rather, change occurs in progressive stages, each characterized by particular issues and challenges. Those stages are

- Precontemplation
- Contemplation
- Preparation/Determination
- Action/Willpower
- Maintenance

PRECONTEMPLATION The *precontemplation stage* occurs when individuals are not yet genuinely thinking about changing. They may even be unaware that they have a problem behavior. Individuals who drink to excess but are not aware that their drinking is affecting their work may be in the precontemplation phase. At this stage, raising one's consciousness about the problem is crucial.

A woman who smokes may find her consciousness raised by the experience of becoming pregnant. A man who is stopped for drunk driving may be forced to take a good look at his drinking. Similarly, overweight individuals may not recognize their problem until they see photos of themselves taken at a family reunion or until they learn that an order of a McDonald's Big Mac, large fries, and large chocolate shake amounts to over 2,000 calories, the recommended caloric intake for an adult woman for an entire day.

It is common for individuals in the precontemplation phase to deny that their behavior is a problem and to defend it, claiming that "I don't drink/smoke/eat that much." Overweight individuals may discover that they do eat "that much" when they start keeping track of calories.

CONTEMPLATION In the *contemplation stage*, individuals acknowledge the problem but may not be ready to commit to change. As the name of the stage suggests, © Ingram Publishing/Fotosearch



at this point individuals are actively thinking about change. They might reevaluate themselves and the place of this behavior in their life. They understandably may have mixed feelings about giving up a bad habit. For example, how will they deal with missing their friends on a smoke break? Or going out drinking? Or packing a healthy lunch instead of heading to the drive-thru? They may weigh the short-term gains of the harmful behavior against the long-term benefits of changing. Future rewards can be difficult to pursue when immediate pleasures beckon. Sure, it would be nice to be thinner, but losing weight is going to take time, and that hot fudge sundae is right there, looking very delicious.

PREPARATION/DETERMINATION In the *preparation/determination stage*, individuals are getting ready to take action. At this point, self-belief and especially beliefs about one's ability to "see it through" are very important. A key consideration is whether individuals truly feel they are ready to change.

During the preparation/determination stage, individuals start thinking concretely about how they might take on their new challenge. For example, they explore options for the best ways to quit smoking or drinking or to start an exercise program. Some smokers might consider trying a nicotine patch or participating in a support group for people wanting to quit. Individuals who are seeking to lose weight might think about joining a gym or setting the alarm clock for a 6:00 A.M. run.


ACTION/WILLPOWER At the *action/willpower stage*, individuals commit to making a real behavioral change and enact an effective plan. An important challenge at this stage is to find ways to support the new, healthy behavior pattern. One approach is to establish reinforcements or rewards for the new behavior. Individuals who have quit smoking might focus on how much better food tastes after they have given up cigarettes. Successful dieters might treat themselves to a shopping trip to buy new, smaller-size clothes. Acknowledging, enjoying, and celebrating accomplishments can motivate consistent behavior.

Another source of support for new behaviors is the individual's social network (Taylor, 2015). Friends, family, and members of a support group can help through their encouraging words and behaviors (Antonucci, Birditt, & Ajrouch, 2013; Xanthopoulos & Daniel, 2013). Members of a family might all quit smoking at the same time or join the individual in physical activities or healthier eating.

Finally, individuals may focus on alternative behaviors that replace the unhealthy ones. Instead of bar hopping, they might join a group dedicated to activities not associated with drinking alcohol, such as a dance club or community theater group. In other words, effective change also involves avoiding temptations.

MAINTENANCE In the *maintenance stage*, individuals successfully avoid temptation and consistently pursue healthy behaviors. They may become skilled at anticipating tempting situations and avoid them or actively prepare for them. If smokers seeking to kick the habit know that they always enjoy a cigarette after a big meal out with friends, they might mentally prepare themselves for that temptation before going out. Successful dieters might post a consciousness-raising photograph on the refrigerator.

At some point, individuals in maintenance may find that actively fighting the urge to indulge in unhealthy behaviors is no longer necessary. *Transcendence* means that they are no longer consciously engaged in maintaining

 Can you quit smoking if you are spending time with smokers? Can you avoid binge drinking if you regularly go to keg parties?




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their healthy lifestyle; rather, the lifestyle has become a part of who they are. They are now nonsmokers, healthy eaters, or committed runners.

RELAPSE One challenge during the maintenance stage is to avoid **relapse**, a return to former unhealthy patterns. Relapse is a common aspect of change, and it can be discouraging. However, the majority of people who eventually do change do not succeed on the first try. Rather, they try and fail and try again, cycling through the five stages several times before achieving a stable, healthy lifestyle. Consequently, individuals who are experts in changing health behavior consider relapse to be normal (Prochaska & Norcross, 2013).

If you have ever tried to adopt a healthier lifestyle by dieting, starting an exercise program, or quitting smoking, you might know how bad you feel when you experience relapse. One slip, however, does not mean that you are a failure and will never reach your goal. Rather, when a slipup occurs, you have an opportunity to learn, to think about what led to the relapse, and to devise a strategy for preventing it in the future. Successful dieters, for example, do not let one lapse in the doughnut shop ruin the week (Phelan & others, 2003).

relapse
A return to former unhealthy patterns.

 *Relapse is a normal part of change. What does this principle suggest about recovery from drug addiction?*

EVALUATION OF THE STAGES OF CHANGE MODEL The stages of change model has been applied successfully to a broad range of behaviors. These include cigarette smoking (Luh & others, 2014), exercise (Zhu & others, 2014), safe-sex practices (Arden & Armitage, 2008; Naar-King & others, 2006), substance use and abuse (DiClemente, 2006; Harrell & others, 2013), weight loss (Macqueen, Brynes, & Frost, 2002), and return to work (Lam & others, 2010).

Despite its relevance to a variety of behaviors, the stages of change model is controversial (Brug & others, 2005; Joseph, Breslin, & Skinner, 1999). Some critics have questioned whether the stages are mutually exclusive and whether individuals move from one stage to another in the order proposed (Littrell & Girvin, 2002). Critics of the model also point out that it refers more to attitudes that change than to behaviors (West, 2005). On the more positive side, some evidence suggests that the stages of change model does a good job of capturing the ways that individuals make positive life changes (Lippke & others, 2009; Schüz & others, 2009). A meta-analysis of 39 studies that encompassed more than 8,000 psychotherapy clients found that the stages of change model was effective in predicting psychotherapy outcomes (Norcross, Krebs, & Prochaska, 2011).

Experts have argued that the model can be a tool for therapists who are trying to help clients institute healthy behavior patterns. Sometimes, sharing the model with individuals who are trying to change provides them with a useful language for understanding the change process, for reducing uncertainty, and for developing realistic expectations for the difficult journey (Hodgins, 2005; Schüz & others, 2009).

self-quiz

1. The theoretical model that breaks down behavioral change into five distinct steps is the
 - A. theory of planned behavior.
 - B. theory of reasoned action.
 - C. cognitive theory of change.
 - D. stages of change model.
2. When someone who is trying to change a behavior returns to unhealthy patterns, we say that he or she is in a state of
 - A. denial.
 - B. relapse.
 - C. plateau.
 - D. maintenance.

3. The stages of change model
 - A. is not at all controversial.
 - B. applies to a wide variety of behaviors.
 - C. does not apply to cigarette smoking.
 - D. does not apply to safe-sex practices.

APPLY IT! 4. Malcolm has been trying to quit smoking for two years. During his last attempt, he went three full months without smoking but then had a cigarette after a big fight with his girlfriend. He is feeling hopeless about

- his chances of quitting. What does the stages of change model say about Malcolm's situation?
- A. Relapse is a normal part of change. Malcolm might think about why he relapsed and try to move on from there with a new strategy.
 - B. Malcolm has blown it and will probably never quit smoking.
 - C. Malcolm is stuck in the contemplation phase of change.
 - D. Malcolm is unusual in that he had a relapse after three full months. He probably has a particularly strong addiction to cigarettes.

3

Resources for Effective Life Change

Making positive changes to promote health can be very challenging. Fortunately, we all have various psychological, social, and cultural resources at our disposal to help us in the journey to a healthier lifestyle. In this section we consider some of these tools that can help us achieve effective change and, ultimately, a healthier life.

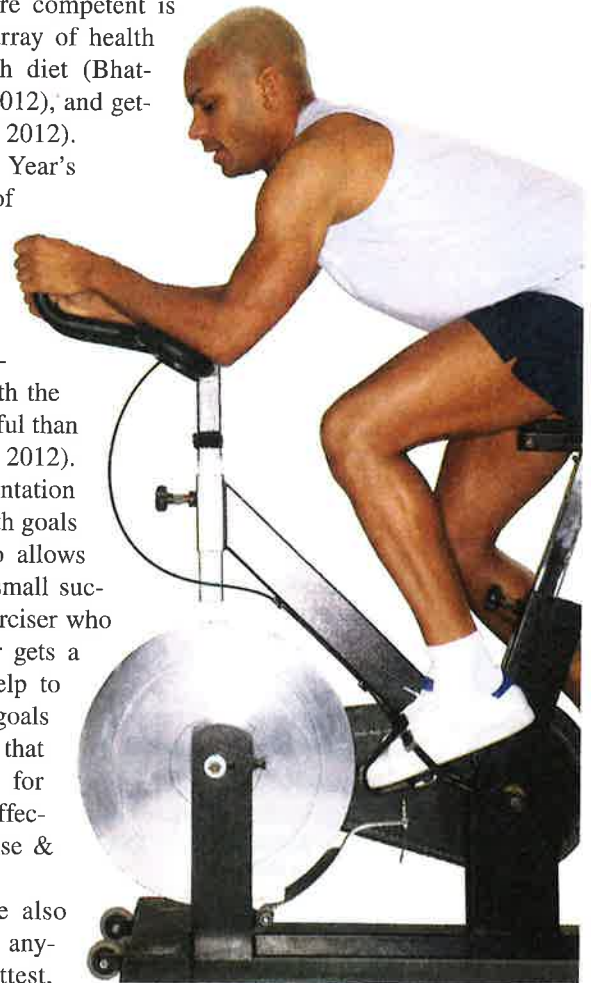
Motivation

Recall that motivation refers to the “why” of behavior. Motivational tools for self-change involve changing for the right reasons. Change is most effective when you are doing it for you—because you want to. An analysis of intervention programs aimed at reducing childhood and adolescent obesity found that those who had joined voluntarily were more likely to lose weight than their counterparts who had been required to join (Stice, Shaw, & Marti, 2006).

Self-determination theory distinguishes between intrinsic motivation (doing something because you want to) and extrinsic motivation (doing something for external rewards). Research has shown that creating a context in which people feel more in control, more autonomous, and more competent is associated with enhanced outcomes for a broad array of health behaviors, including controlling diabetes through diet (Bhattacharya, 2012), quitting smoking (Deci & Ryan, 2012), and getting regular physical exercise (Fortier & others, 2012). Individuals are more likely to succeed in their New Year’s resolutions if they approach them with a sense of both self-efficacy and autonomy (Koestner & others, 2006).

Planning and goal setting are also crucial to making effective change. Researchers have found that individuals who come up with specific strategies, or **implementation intentions**, for dealing with the challenges of making a life change are more successful than others at navigating change (Prestwich & others, 2012). “Implement” means put into action. So, implementation intentions are strategies for actually putting our health goals to work. Setting short-term, achievable goals also allows individuals to experience the emotional payoff of small successes along the way to self-change. The novice exerciser who catches a glimpse of his new biceps in the mirror gets a mood boost. These feelings of satisfaction can help to motivate continued effort toward achieving health goals (Harris & others, 2014). A meta-analysis revealed that implementation intentions were more effective for including healthy food in one’s diet but were not as effective in reducing unhealthy eating patterns (Adriaanse & others, 2011).

Enjoying the payoffs of our efforts to change also means that we must monitor our goal progress. As anyone who has watched *The Biggest Loser* will attest, stepping on a scale can be a scary prospect for someone



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Implementation intentions
Specific strategies for dealing with the challenges of making a life change.



Whether the news is good or bad, information is important for making real progress.

who is trying to lose weight. However, it is important to get feedback on one's progress in the pursuit of any goal. If an individual finds out that she is falling short, she can try to identify areas that need work. On the other hand, discovering that she is doing well can be a potent motivator for future progress.

Social Relationships

Research has shown, again and again, that social ties are an important, if not the most important, variable in predicting health (Cohen-Mansfield & Perach, 2015; Hu, Li, & Arao, 2014; Nanjappa & others, 2014). In a landmark study, social isolation had six times the effect on mortality rates that cigarette smoking had (House, Landis, & Umberson, 1988). In another study involving 1,234 cardiac patients, those living alone were nearly twice as likely to have a second heart attack (Case & others, 1992). Loneliness is linked with impaired physical health (cardiovascular disease, for example) (Hawkley & Cacioppo, 2012a, 2012b; Momtaz & others, 2012) and mental health (depression, for example) (Aylaz & others, 2012), and chronic loneliness can lead to an early death (Luo & others, 2012). Being connected to others is crucial to survival. One way that social connections make a difference in our lives is through social support (Li, Ji, & Chen, 2014). A recent study found that social support helped to reduce the negative connection between loneliness and depression (Liu, Gou, & Zuo, 2014).

social support

Information and feedback from others indicating that one is loved and cared for, esteemed and valued, and included in a network of communication and mutual obligation.

Social support is information and feedback from others indicating that one is loved and cared for, esteemed and valued, and included in a network of communication and mutual obligation. Social support has three types of benefits (Taylor, 2015):

- ✦ **Tangible assistance:** Family and friends can provide goods and services in stressful circumstances, as when gifts of food are given after the death of a loved one.
- ✦ **Information:** Individuals who extend support can also recommend specific strategies to help the person under stress cope. Friends may notice that a coworker is overloaded with work and suggest ways of better managing time or delegating tasks.
- ✦ **Emotional support:** Individuals under stress often suffer emotionally and may develop depression, anxiety, or loss of self-esteem. Friends and family can reassure the stressed person that he or she is valuable and loved. Knowing that others care allows a person to manage stress with greater assurance.


One way that people gain support during difficult times is through *social sharing*—turning to others who act as a sounding board or a willing ear. Individuals who are striving to make healthy life changes might join a group of others who are also struggling with the same issue. Social sharing can also occur in online support groups.

Sometimes sharing our thoughts and feelings does not have to be very social to be helpful. James Pennebaker and his colleagues (Pennebaker, 1997a, 1997b, 2004) have demonstrated that writing about traumatic life events for 20 minutes a day over two or three days is associated with improved health, fewer illnesses, greater immune system function, and superior reactions to vaccines. Although writing about trauma is usually linked to increased distress in the short term, over the long run it brings physical and psychological health benefits (Baddeley & Pennebaker, 2011; Frattaroli, 2006; Pennebaker & Chung, 2007, 2011; Smyth, 1998). In most of these studies, the participants were college students writing about their most traumatic life events, and the studies' results suggest that anyone can benefit from writing about negative life events. Subsequent studies have found health benefits for writing about life goals and intensely positive life experiences (Burton & King, 2004, 2008; King, 2002). If you would like to give this simple intervention a try, see Figure 2.

Getting support from others is important, but *giving* support can also have benefits. A study of 423 older adult couples who were followed for five years revealed how

helping others benefits physical health (Brown & others, 2003). At the beginning of the study, the couples were asked about the extent to which they had given or received emotional or practical help in the past year. Five years later, those who said they had helped others were half as likely to have died. One possible reason for this finding is that helping others may reduce the output of stress hormones, an effect that improves cardiovascular health and strengthens the immune system (Hackett & others, 2012; Hawkley & Cacioppo, 2012a, 2012b).

Having many different social ties may be especially important during difficult times (Hawkley & Cacioppo, 2012a, 2012b; Taylor, 2015). People who participate in more diverse social networks—for example, having a close relationship with a partner; interacting with family members, friends, neighbors, and fellow workers; and belonging to social and religious groups—live longer than people with fewer types of social relationships (Vogt & others, 1992). One study investigated the effects of diverse social ties on the susceptibility of getting a common cold (Cohen & others, 1998). Individuals reported the extent of their participation in 12 types of social ties. Then they were given nasal drops containing a cold virus and monitored for the appearance of a cold. Individuals with more diverse social ties were less likely to get a cold than their counterparts with less diverse social networks.

 Ethics guidelines would have dictated the need for the participants' informed consent, meaning that they agreed to be injected with the cold virus.

Find a quiet place to write.

Pick just one topic to explore through writing.

Dedicate yourself to at least 20 minutes of writing about that topic.

While writing, do not be concerned with grammar or spelling; just let yourself go and write about all of the emotions, thoughts, and feelings associated with the experience you are writing about.

If you feel that writing about something negative is not for you, try writing about your most positive life experiences, about the people you care about, or all the things you feel grateful for in life.

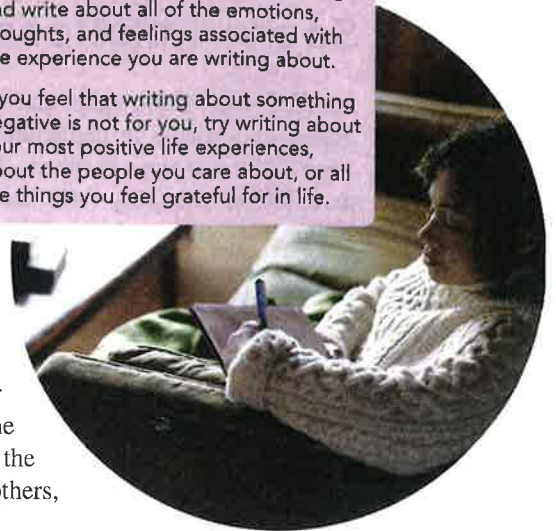


FIGURE 2

Harnessing the Power of Writing Try this simple exercise to explore the health benefits of writing.

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Religious Faith

Religious faith is strongly related to maintaining a healthy lifestyle and to good health (Koenig, King, & Carson, 2012; Krause & Hayward, 2014). Many religions frown on excess and promote moderation. Indeed, weekly religious attendance relates to a host of healthy behaviors, including not smoking, taking vitamins, walking regularly, wearing seatbelts, exercising strenuously, sleeping soundly, and drinking moderately or not at all (Haber, Koenig, & Jacob, 2011; Hill & others, 2006). A number of studies have definitively linked religious participation to a longer and healthier life (Campbell, Yoon, & Johnstone, 2009; Koenig, 2012; Krause, 2006; McCullough & Willoughby, 2009).

Religious participation may also benefit health through its relationship to social support (Hovey & others, 2014). Belonging to a faith community may give people access to a warm group of others who are available during times of need. This community is there to provide transportation to the doctor, to check in with the individual during hard times, and simply to stand next to the individual during a worship service, as a fellow member of the community. The social connections promoted by religious activity can forestall anxiety and depression and help to prevent isolation and loneliness (Dein, Cook, & Koenig, 2012; Rosmarin, Krumrei, & Andersson, 2009; Ross & others, 2009). For example, a recent study of African Americans found that church-based social support was protective against depressive symptoms (Chatters & others, 2014).