# Beyond Snyder's Hope Theory: The Necessity to Redefine Hope and Create a Comprehensive Hope Scale in Korea\*

Ppudah Ki<sup>+</sup> Dong-gwi Lee Hye-Young Kim Yonsei University

This paper introduces the hope concept as a promising positive psychological construct. The various conceptualizations of hope reviewed. Snyder's hope theory, which is the most pervasively used, is scrutinized, leaving the identification of some limitations. First, the definition focusing on pathway and agency thinking as well as goal attainment in Snyder's hope theory does not reflect the original meaning of hope in laymen's perspective. In addition, the heavy endorsement in cognitive processes in his theory is subjected to criticism; we call for scholars' attention to other core components of hope (emotion and future aspects). Third, the measurement issue is raised as well since Snyder's Hope Scale neither reflects its own theory, nor includes some other important features of hope. Finally, the applicability of Snyder's hope theory is limited as well in that the narrow-sensed definition of hope in his theory might mislead readers to a restricted meaning of hope. Given these limitations, this paper offers some caution to use and ends with suggestions for future research directions.

#### Keywords: Positive psychology; Hope

The positive psychology paradigm has gained an increasing attention in psychological research and practice (Seligman & Csikszentmihalyi, 2000). Before, theorists and researchers focused mainly on human

dysfunctional aspects, such as depression, anxiety, disorders, and neuroticism due to the belief that the removal of negative signs could lead to positive outcomes. However, the cogent idea that positivism and

<sup>\*</sup> This research was founded by BK21 awarded to the department of psychology of Yonsei University.

<sup>\*</sup>Corresponding author: Ppudah Ki, Department of Psychology, Yonsei University, 134, Shinchon-dong, Seodaemun-gu, Seoul 120-749, Korea, Tel: 02) 2123-2437, E-mail: isabelle\_ki@hotmail.com

if we would like to operate positivism in our life, we should focus on investigating what the positive characteristics are, instead of inspecting negative aspects of

One of the major ideas of positive psychology might be helping individuals to make full use of what they have by finding and developing their strengths and social support as well as overcoming their problems. For example, Seligman (2002) stated that enhancing strengths can prevent depression and anxiety effectively, and the effective prevention of problematic behaviors in adolescents is not correcting problems but identifying and developing their strengths and assets (Lee, 2007). In this vein, various studies on the beneficial functions of positive mind are on process, and several constructs in positive psychology, such as happiness, positive emotions, and optimism, have been reemerged. Among these constructs, hope is also one of the positive psychological constructs that have been paid much attention to (Snyder & Lopez, 2007).

There are several research findings on hope suggesting that hope is one of the essential positive psychological constructs boosting individuals' motivation and affecting them to have positive attitudes and outcomes in life (Snyder, 1995). Even in laymen's perspective, one can generally imagine how prominent hope is to someone who experiences adversities as well as any individuals who are willing to approach to any further step in life. In addition, not only the personal advantages but also functions of hope in a societal level are worth to further explore for the macro perspective of positive psychology. For example, the notion of collectivistic hope, which

negativism might not be on one continuum has been means hope of the majority of people, is suggested as arisen, although it is still controversial, which has a promising research area in terms of disarmament, certainly facilitated the positive psychological research environments, and public health issues. For these reasons, development (Ryan & Deci, 2001). Positive psycholo- hope is the topic to scrutinize in this review; we will gists propose that because positivism and negativism do introduce the several previous and current research on not stem from one root, the elimination of negativism hope, its strengths and weaknesses, and future direction does not necessarily promote positive outcomes. That is, of hope research including hope studies particularly in Korea.

> The History of Hope Research: Many Definitions Although the concept of hope has been studied more frequently along the advent of the positive psychology movement, it is not a completely new construct in academia. In nursing and clinical psychology, many theorists and practitioners have searched for the function of hope to patients, and in psychology as well some researchers had interests in the hope concept since 1950's. However, the problem is there are several kinds of definitions and conceptualization on hope, not converging in one another very well. Each researcher offered his or her own conceptualization on hope separately despite some overlaps.

Furthermore, scientific methods and logical investigation were deficient in the early research; as a result, the elements of hope were partly touched on (Lopez, Snyder, & Pedrotti, 2003). The early researchers in the 1950's and 1960's have defined hope as positive expectations for goal attainment (Menninger, 1959; Stotland, 1969). Menninger (1959), as a head of the American Psychiatric Association gave a lecture on hope and some opinions that cognitive function of hope might be the underlying ground, but he did not continue to perform any practical research on hope. Stotland showed the relationship between hope and psychopathology (Kang, 2002). He applied the notion of motivation in conceptualizing hope and conceived hope as a measurable variable in his book, Psychology of Hope. He emphasized the perceived possibility as a core component of hope (Choi, 2008; Lee, 2007). However, he did not further develop the proper measurement comprehended in the context of society and culture in emphasized and what are not. their book, Rules of Hope (Lopez et al., 2003).

Another conceptualization of hope was made by Mowrer (1960). He saw hope in emotional and behavioral perspectives, suggesting that hope functions as an emotional state in secondary reinforcement in stimulus and response experiments. Marcel (1962) put hope in a more philosophical and collectivistic view. According to him, hope can be applied to society and an emotional form of collectivistic coping in a societal level (Lopez et al., 2003). Although Mowrer and Marcel attempted to add some emotional aspects to the conceptualization of hope, Mowrer was more involved in learning theory and behavior, and Marcel was not in a psychology field. Thus, even though they offered some notions on hope, they did not conduct following empirical research on hope. Later, Staats (1985, 1989) attempted to combine the cognitive role with the emotional function of hope, defining hope as the interaction between emotional wishes and cognitive expectations.

In essence, the early hope researchers had not achieved a consensus with regard to the decisive definition of hope; part of this seemed to stem from the lack of a sound theoretical framework and constant scientific and empirical research. One salient exception involves the hope theory developed and validated by Snyder, Harris, Anderson, Holleran, Irving, et al. (1991). Snyder et al. (1991) compiled several hope concepts that were scattered in pieces, and moved on developing scales to measure the hope construct. Considering the number of research performed by Snyder and his colleagues, it gives us enough impression that he was very dedicated to hope study and its settlement as a sound psychological

reflecting his belief, which inhibited the advancement in construct. Snyder's hope theory received attention along scientific and empirical research. According to hope with the current positive psychology popularity, and research of Averill, Catlin, and Chon (1990), individuals many research papers based on Snyder's hope theory are able to have hope when possessing their own goals, have been published and cited. In this light, it would be the control ability toward the goal, as well as social and worthwhile to examine Snyder's hope theory more closely cultural acceptance. They mentioned that hope should be and analyze what components of hope are included and

Snyder's Hope Theory

#### Theoretical framework

To further discuss what hope is all about in positive psychology, we need to scrutinize Snyder's hope theory. According to Snyder (2002), "hope is defined as the perceived capability to derive pathways to desired goals, and motivate oneself via agency thinking to use those pathways" (p.249). Snyder and his colleagues viewed hope fundamentally as a cognitive process toward goal attainment with some emotions reactively functioning in the process. This cognitive aspect stems from the fact that Snyder was greatly influenced and inspired by the power of cognition when explaining the origins of the theory. As seen in Figure 1, Snyder and his colleagues propose that hope is composed of three main components : goals, pathway thinking, and agency thinking. First, since Snyder's theory assumes that human beings are goaloriented in nature, positive expectations toward goal attainment is related closely to hope. This postulation has been discussed densely and supported empirically as well (Snyder, 1994; Snyder, Cheavens, & Sympson, 1997; Snyder, Sympson, Michael, & Cheavens, 2000; Stotland, 1969). Second, pathway thinking involves individuals' cognitive ability to find out possible ways and coping to accomplish their goal(s). People with high hope are believed to have effective perceived capability to discover various alternative means to their targets. Lastly, the agency thinking concerns a motivational aspect of hope and the individuals' will power related to the 'I can do it' attitude. It is somewhat associated with the confidence of individuals motivating

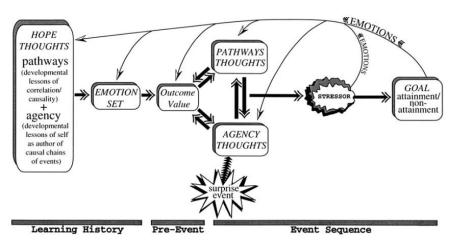


Figure 1. Snyder's Hope Theory (Adopted from Snyder, 2002, p.259).

themselves to continue going for goals.

#### Research with Snyder's hope theory

In various research outcomes, it is shown that hope positively affects several areas of our life.

According to Curry, Snyder, Cook, Ruby, and Rehm (1997), hope is related to academic achievement, one of the core components in an educational setting. As hope increases, the grades do as well (Snyder, Wicklund, & Cheavens, 1999). Furthermore, through the hopeful thinking, students can focus on school assignments and prevent themselves from falling into self-defeating thinking and negative mind (Snyder, 2004). Enhancing the hope level, students can improve various skills to achieve the goals and their motivation to implement their plans for goals. According to Snyder, the use of hope theory can benefit students in school circumstances by generating and conducting hopeful thinking programs. Moreover, the link between high hope and good performance in academia, Snyder suggests, is the trial and ability to find multiple pathways toward the goal (Onwuegbuzie & Snyder, 2000; Snyder, 2002). Although Snyder admits the function of teachers' encouragement plays an important role in students' academic performance as another factor, he ascertains that hope is a significant factor to investigate

in the academic and educational world, demonstrating different performance between high and low hope students.

Hope research is also applied to the athletic field. According to Curry and Snyder (2000), individuals with the same level of gifted talents can show different consequences depending on their hope level. Athletes with high hope perform better than low hope athletes in stressful situations. They were better at dealing with stress. This is because their hopeful thinking enabled them to find the best way out of hardship and their own way to get motivated. This works similarly with the reason high hopers have better results in academia. Since athletics who had high hope or took a course promoting hopeful thinking probably had the better ability to find routes toward goal attainments, the athletes performed better (Snyder, 2002).

Undoubtedly, hope is deeply related to psychological well-being and adjustment. According to Curry et al. (1997), high hope is connected to positive emotions, and low hope may lead to negative affects. It is also postulated that individuals with high hope tend to maintain positive affective states (Snyder, Feldman, Taylor, Schroeder, & Adams, 2000). In addition, hope i nfluences a way of coping greatly. High hope people tend to better cope with their stressors and to create strategies to overcome

distress than low hope people. This is somehow related to the pathway thinking ability in Snyder's hope theory. Also, individuals with high hope easily acknowledge their stressors and have realistic flexibility to find out possible alternatives (Snyder & Pulvers, 2001).

Snyder also gave some thoughts about loss of hope. Since hope is a prominent mental state and subjective feature in maintaining healthy and positive life, loss of hope might be the opposite of the healthful characteristics. Snyder described some situations that people can be at risk of losing hope. The examples include neglected children without proper care, children who lost a parent, adults who lost a beloved one, and people who experienced traumatic events (Snyder, 2002). In addition, he also provided the caution of a false hope concept. False hope involves with poorly selected goals where they are too big or bad and terrible planning where the routes toward goal attainment are inappropriate (Snyder, 2002). Considering this, we can see how much Snyder was devoted to hope theory dealing with various related concepts. Likewise, Snyder and his colleagues had conducted a pretty heavy volume of research and tried to apply their new theory and measurement to various fields. This is why we consider Snyder's hope theory the most pervasive hope model and attempt to make further modification and development.

#### Measurement

The rapid growth in the research on hope since 1990's can be attributed to the development of the Hope Scale (Lopez et al., 2003). Before, there were as many measures as definitions of hope in the research area (Lopez, Snyder, & Pedrotti, 2003). However, as Snyder's hope theory becomes popular, Snyder's measures accordingly become the first-choice measure in hope research. There are three scales Snyder and his colleagues developed following their hope theory. First, the Adult Dispositional Hope Scale is designed to measure pathways thinking and agency thinking. It consists of 12 items : 4 items for

pathways thinking, 4 items measuring agency thinking, and 4 distracters. The Cronbach's alphas ranged from .74 to .84 for the total item scores. Second, whereas the Dispositional Hope Scale measures trait-like aspect of hope, the Adult State Hope Scale focuses on situation-specific features of hope at a given time. This scale consists of 6 items, and its Cronbach's alphas ranged from .79 to .95. The last one is the Children's Hope Scale. This scale aims for age 8-16, and its Cronbach alphas have ranged from .72 to .86 (Snyder, 2002).

The Limitations of Snyder's Discussion on Hope Although Snyder and his colleagues provided pretty sound ground on hope research and made it blossom, there are some issues to be raised up in terms of its definition, main components, measurement, and application.

#### The definition issues

As per a dictionary definition, hope in a noun is described as "the feeling that what is wanted can be had or that events will turn out for the best." Hope in a verb with object is "to look forward to with desire and reasonable confidence" or "to believe, desire, and trust." Hope in a verb without object is "to feel that something desired may happen" (http://dictionary.reference.com/ browse/hope). In addition, the Oxford dictionary defines hope as "a feeling of expectation and desire for a particular thing to happen" and "grounds for believing that something good may happen" in a noun and as "want something to happen or be the case" and "intend if possible to do something" in a verb (http://www.oed. com). As we can see here, the general meaning of hope is somewhat different from what Snyder defined; "the perceived capability to derive pathways to desired goals, and motivate oneself via agency thinking to use those pathways" (Snyder, 2002, p.249). Given that hope is a multifaceted construct and that the process to hoping is dynamic (Stechynsky, 1999), Snyder and his colleagues

some core components of hope.

in learning history and event sequence (Snyder, 2002, laymen's perspective on hope. p.249). This seems to us that Snyder and his colleagues admitted that the role of emotion was not central but just contributory in part in their hope theory. As seen in Figure 1, the main stream of the model flows to goal attainment with the interaction of pathways thinking and agency thinking, not the emotion as essential. It makes sense in that people hope for something, implying that there should be an objective when we do hope. In this light, the objective could be interpreted as the goal attainment in the hope process suggested by Snyder. However, the entire hope model with emphasis on cognition is not intuitively comprehended unless there is a reframing process what it really means as hope. That is, it does not really work for the first sense. When people actually encounter the word 'hope', the first thing that comes into mind might not be the thinking process toward a goal, just as the dictionary definition showed us. Then, what would be the prevalent components of hope will be discussed shortly under the section of the main components of hope.

In this aspect, it is worthwhile to discuss the findings from Bruininks and Malle (2005), who also raised the conceptual issue of hope. In their study of distinguishing hope from other related affective states in order to prove the definitional and psychological differences among the states, they asked participants to describe hope and other associated mental states. After trained experimenters coded the features of the affective states, the most prevalent features of hope identified were future outcomes. It means that hope is predominantly and intuitively related to future events in laymen's perspective. Also, most participants described hope as an emotion. Although

seemed to define hope in a narrow sense and missed many participants mentioned about goals, it was about the function of hope as keeping individuals' focus on The fundamental concept of hope in Snyder's theory is goals and controlling negative affects. As hinted from the feed-forward and feedback cognitive process of path- Bruininks and Malle's (2005) findings, agency or pathways ways and agency thinking toward goal attainment, although thinking processes, the two dimensions of hope in it is maintained that emotion plays a "contributory" role Snyder's hope theory, were not explicitly declared in

#### The main components of hope

According to Snyder's hope theory as depicted in Figure 1, its core components in the hope process are deemed the agency and pathways thinking processes toward goal accomplishment. However, besides the cognition part and goals, other major components of hope are found in the universal definition and literature on hope.

First of all, emotion is described as reactive consequences of some events and dealt with in a relatively minor sense in Snyder's hope theory. As seen in Figure 1, the hope model suggests that the negative emotions come from the stressor, and people have positive emotions after the goal attainment. However, this etiology of emotion limits the whole function of affects in our daily life. In this light, Aspinwall (1998, 2001) maintained that affects play a much more central role in goal-pursuit than Snyder and his colleagues illustrate in Figure 1. Individuals tend to use emotional information when they determine what goals to pursue or what decisions to make (Aspinwall, 1998; Carver & Scheier, 1999; Hsee & Abelson, 1991). In addition, even though Snyder's hope theory described emotion as having invariant results from certain events, the role of emotion must vary depending on the circumstantial context (Aspinwall & Leaf, 2002). This opinion of Aspinwall on the function of emotion can lead us to encourage the idea that emotion can play an influential role in the cognitive hope process and should not be neglected just as a contributory role. Thus, Snyder's opinion on the role of emotion in the hope process seems to limit the dynamic function of affects.

The emotion part that Snyder's theory overlooked is well shown in the previous hope research. Staats, one of the early hope researchers mentioned in the history part in this paper, emphasized hope is the combination of cognition and affect. In her paper, she regarded hope as an affective cognition, explaining that "hope implies both expectation of a future event and the things that people hope for are pleasant events or good outcomes" (Staats, 1985). Here, the cognitive aspects of hope refers to the expectation for some future events, and the affective aspects of hope directs the good feelings that pleasant events and good outcome results will occur. This is why the two hope scales, The Expected Balance Scale (EBS) and The Hope Index she mentioned in her papers, include the affective aspects of hope. On the one hand, the EBS is originally made from a modified affective balance scale. The instruction was simply changed from 'in the last few weeks' to 'next few weeks do you expect...?' When we look at the item contents in this scale, the 15 items contain the verb 'feel', and they are full of affective words, such as "pleased, excited, interested, and cheerful" (Staats, 1985). Even though Staats describes the EBS as an affect-oriented hope scale generated from an affect measurement, this gives us the noteworthy idea that affective aspects are prominent contents measuring hope. On the other hand, The Hope Index does include the cognitive aspect of hope as well as the affective one. In the scale, it contains two questions on each items. The first question is 'to what extent would you wish for this', and the other questions is 'to what extent do you expect this'. Staats describes the wish questions imply the affective features when we hope, and the expectation engages with the cognitive aspects of hope. These two hope scales certainly show us that emotion is one importance factor in hope.

conceptualizing hope : Do we really have hope only (Aspinwall & Leaf, 2002). when there is a goal? Or, is it not possible that we have

hope when there is no goal? As described in some previous hope papers highlighting the affective components, the hopeful feelings that something good will occur, even while individuals do not have any goal, are real and present in our life. When we actually hope for something, we have the cognitive aspect to get the "thing" we hope, but at the same time, we have the emotion part of longing and wishing. This longing and wishing feeling in hope could be pleased, excited, interested, and cheerful as described in the EBS (Staats, 1985). These kinds of hopeful feelings can lead to activate more cognitive process when we hope, as Aspinwall and their colleagues insisted in their papers explaining the central role of emotions in goal pursuit (Aspinwall, 1998). This is very consistent with what Staats insisted that hope is natural interactive process of both cognitive and affective elements (Staats, 1985). Likewise, the emotion component of hope has been one of the core elements in the hope research history; however, in Snyder's hope theory, it is simply involved in the feedback process of the hope model (see Figure 1), not included in the item contents in Snyder's hope scale (see Table 1).

Secondly, hope is intrinsically future-oriented; nevertheless, Snyder's hope theory does not include the future components. Snyder and his colleagues might defend themselves by suggesting that the process toward goal attainment itself is implicitly future-focused. However, it is quite contrary when scrutinizing the items of the Hopelessness Scale developed by Beck, Weissman, Lester, and Trexler (1974). Note that 16 items out of 20 (80%) explicitly express the future and prospect elements in the scale. Contradictory, only one item with future orientation was included in the Snyder et al.'s (1991) Adult Trait Hope Scale (see Table 1). When comparing these two In addition, we have to ask the following questions scales related to hope, we can easily notice that Snyder's to describe why the emotion part is important in hope theory fails to address the future elements explicitly

In sum, hope is certainly connected to the cognitive

Table 1. Snyder's Hope Scale.

Snyder's Hope Scale				
Agency thinking	Pathway thinking			
2. I energetically pursue my goals.	1. I can think of many ways to get out of a jam.			
9. My past experiences have prepared me well for my future.	4. There are lots of ways around any problem.			
0. I've been pretty successful in life.  6. I can think of many ways to get the things in li most important to me.				
12. I meet the goals that I set for myself.	8. Even when others get discouraged, I know I can find a way to solve the problem.			

Note. The rest 4 items (number 3, 5, 7, 11) are fillers.

part toward goal pursuit; nevertheless, other primary components of hope are missing in the Snyder's hope process. Hope could sound unreasonable without the emphasis of emotion and future components. Therefore, Snyder's thinking process based on their conceptualization of hope just partly touches on the original meaning of hope understood by the majority, leaving a substantial room for restructuring its subfactors.

#### The measurement issues

Just as Snyder and his colleagues may overlook some important elements in defining hope, they seemed to fail to notice prevalent components of hope in their measurements as well. Actually, Snyder's hope theory does include the functions of emotion although less emphasis given to emotion can be problematic. As mentioned earlier, however, the Adult Dispositional Hope Scale, made from this theory, which is also the most frequently used, does not include any emotional aspect in it. Specifically, among the 12 items of the scale, four items are designed to measure agency thinking; another four items assess pathways thinking, and the other four items are just fillers. The two subfactors of the hope scale are not related to emotion. When we look at the wordings in the 12 items from Table 1, most of the words are the terms related to thinking process and/or goal pursuit, such as "think of", "pursue", "ways",

"find a way", "solve the problem", "prepare", "successful", and "meet the goals." It is certain that these expressions involve solely the aspects of cognition and goal pursuit only. Saliently, the sense of emotion is not represented well in the 12 items. Some expressions that seem to reflect a sense of emotion might be "energetically" and "discouraged" at most. In essence, although this scale measures cognitive process quite soundly, it does not contain the central function of emotion just as the theory does not focus on it. As we pointed out in the main component issue above, one of the core components that this scale does not include is the future component of hope. Although Snyder and his colleagues might argue that the process toward goal attainment itself can represent future events implicitly, we can find the word "future" just once in the items of the scale (item number 9), which is never sufficient from our perspective. Again, it is very converse to the pattern of the Hopelessness Scale which reflects the future and prospects elements clearly in their scale. Lastly, the social level of hope is not included in the items of hope scale either.

It might be the crucial drawback for this scale not to contain the functions of other core components of comprehensive hope and focus heavily on cognition-laden components and goal pursuit. This lack of measuring the main components of hope in this scale could lead to a misinterpretation of hope particularly when laymen readers

Scale. Imagine a situation where the readers misinterpret research findings based on the Snyder's Hope Scale due aspect. This leads to our next point.

#### The application issues

high hope people or low hope people, what they actually wh indicate is that individuals with high hopeful thinking ability or people with low hopeful thinking capability. However, when readers just encounter the word 'hope' without fully comprehending Snyder's hope theory, they can confuse the results of hopeful thinking with the comprehensive meaning of hope. Studies using scales based on the narrow definition and component are likely to mislead readers because these results do not globally reflect the characteristics of hope. It is possible that laymen's concepts and researchers' operationally-defined concepts cannot be the same. However, if an operational definition does not reflect the concept commonly used in the real world, the study results based on the definition cannot but have very limited implications and sometimes give wrong information. In this perspective, the studies grounded on Snyder's hope theory have limitations in application.

In addition, there is a problem related to calculating hope level using Snyder's Hope Scales. When you measure the overall hope level, you simply aggregate the two subscales of hope, pathway thinking and agency thinking. However, let us take a case that the level of

encounter with research outcomes using Snyder's Hope pathway thinking is extremely low but that the level of agency thinking is high. In this case, there is a possibility that the whole hope level might be low or medium. In to their general perspective of hope where emotional and contrast, there might be the case that the level of agency societal aspects of hope are intermingled with cognitive thinking is extremely low but that of pathway thinking is not very low. In this case, it is possible that the whole hope level is low. In these two cases, the whole levels of hope are both low, but the contents are qualitatively Taken from our discussion thus far, it would probably different. Although the two subscales tend to be positively be more accurate to call Snyder's concept of hope as related, Snyder (1994) himself mentioned that these two hopeful thinking, rather than hope as a whole, since it does not necessarily covary. For better understanding, in does not reflect the comprehensive aspects of hope. reality, we can think of a person, as an example, who However, the problematic issue is that this hopeful has very strong will power and ambition to get things thinking research is interpreted just as it reflects the done but possesses very poor practical ability in finding general meaning of hope. When each study finding from proper and clever routes to accomplish what he or she Snyder and his colleagues concerns the characteristics of has planned to do. The opposite type would be a person

> o is very sensible in creating specific ways to conduct some work but not strong enough to achieve a final goal. Furthermore, many researchers proved pathway thinking and agency thinking are independent each other and pointed out the problems with using only the aggregated scores (e. g. Cramer & Dyrkacz, 1998; Magaletta & Oliver, 1999). Based on this, Choi (2005) demonstrated that pathway thinking and agency thinking have different functions in relation to goal attainment, depression, and anxiety. Therefore, it is suggested that using separate scores for pathway thinking and agency thinking would be more specific and reasonable to apply and interpret, rather than using the total score. One caution, the functions and relative importance of pathway thinking and agency thinking may be culture-bound, and thus this discussion needs to be used with reservation when the construct of hope is applied to cultures other than the Western culture, such as Korea.

#### Hope Issues in Korea

To sense hope in the Korean context, we investigated some examples where people use the word hope. First of all, there was a very famous phrase that is known and

cited by almost everyone in Korea; that is, 'People are 2). Although the number of papers is still not very place where there is no bright side of life in any field, for the better ground of future hope research. such as depression, isolation, insecurity, injustice, and war. It also goes with any space where there is a need for something revolutionary and new. Furthermore, we found a place called "The Hope Institute". This place is a local center for public relations and deals with maintaining the healthy function of local society. It regularly selects an individual who contributes to hope and posts some inspiring writings on hope. Even though these are just general social phenomena in Korea, we believe that they show the general concern for hope. People generally perceive hope as a personal and social need and a crucial attitude for the bright and positive future.

In academia as well, hope has received increasing attention in nursing and clinical psychology, which generally deals with how hope can function in patients (Kim & Cho, 2001). In psychology, although the history of research on hope in Korea is relatively short and although the current research on hope is mainly shown in some dissertation papers of a couple of universities, we believe the concern for hope has always been around us, and the society and applied academic field in a hospital setting have shown the concern. Now, along with the main trend of positive psychology, hope has received new light in research in the USA, and Korean researchers interested in positive psychology started to explore the hope concept. Considering the positive function of hope in both individuals and society that hope is a mental state related to life enhancement and recovery, the movement that hope research is about to be kindled in Korea is sound and desirable, even though the number is very small currently. In Korea, there was no hope research in the psychology field before the advent of positive psychology; however, it started to catch some attentions, adding its quantity of papers (See Table

the hope.' This phrase is originally generated in a poem significant, we believe it is right time to review the by No-hae Park, who influentially engaged in social property of hope research which has been done in movement. Starting from this, the phrase goes every psychology in Korea so far and to set some directions

#### Research on hope in Korea

Even though the number of research paper on hope is very small, it is certainly increasing (Choi, 2008). The majority of hope research in Korea utilizes correlational analysis with psychological well-being and career related variables as the dependent variable (see Table 2).

First, as for the psychological well-being variables, Kim and Kim (2004) investigated that hope and the meaning of life function as preventive variables influencing the development of adolescents' resiliency. As a result, it is suggested that the hope level and the meaning of life can distinguish resilient adolescents from teenagers suffering from maladjustment. As one result of the study, Kim, M-S. (2004) reported that both hope and selfesteem are negatively correlated with depression. In the same light, Song's (2006) research, undertaken with 355 university students, found that individuals with high hope tend to have lower levels of anxiety compared to people with low hope using t-test, t=-4.37, p<.001, even though hope accounts for 4% of variance in anxiety. In addition, hope is positively correlated with social support, r=.36, p<.01, active coping, r=.43, p<.01, self-efficacy, r=.58, p<.01, and psychological well-being, r=.65, p<.01 (Kim, 2006). All these efforts to make some connections between hope and other aforementioned variables tell us that the trend of hope research in Korea is concerned about psychological well-being and that hope is deeply related to psychological health in our life.

Second, another stem of hope research in Korea is related to career. In terms of the interplay between career and hope, Kim, S. (2005) found that as individuals have high hope and high career self-efficacy, they tend to prepare properly for their careers. Moreover, in case of

Table 2. Hope research findings in Korea.

Research Topi	ic Researcher	Main Results	Scales Used	Sample
Psychological well-being	Kim, M-S. (2004)	Hope is negatively correlated with depressions.	Snyder's	311 university students
	Kim, T-H. (2004)	Hope and life meaning influence to the school adjustment of adolescents.	Snyder's	2235 elementary, middle, high school students and 442 students from social welfare agencies
	Lee, M-O & Ha, J-H. (2006)	Agency thinking in hope significantly predicts marriage adjustment.	Snyder's	337 married women
	Song, E-H. (2006)	High hope people show low level of interpersonal anxiety.	Snyder's	355 university students
	Kim, N-H. (2006)	Hope is positively correlated with social support, active coping, self-efficacy, and psychological well-being.	Snyder's	478 high school students and 305 university students
	Kim, S. J. (2005)	Hope and career self-efficacy positively influence to the career preparation level.	Snyder's	480 university students
	Choi, H-J. (2006)	High hope people perceive career barrier lower and prepare more for their career.	Snyder's	638 undergraduate, graduate students, and unemployed students with degree
behaviors	Oh, H-J. (2006)	Hope is positively correlated with attachment of parents and friends.	Snyder's	200 high school students
	Hong, Y. Y. (2006)	Hope is negatively correlated with the internet game addition tendency.	Snyder's	400 middle school students
C	Kim, J-Y. (2005)	Hope, self-esteem, and career satisfaction of school teachers are positively correlated.	Snyder's	358 elementary, middle, high school teachers
	Choi, D. O. (2005)	Analysis of subfactors of hope : agency thinking and pathway thinking	Snyder's	638 university students
	Kim, H. S. (2005)	Hope level of mothers in play therapy for children and counseling outcomes are positively correlated	Snyder's	104 pairs of mothers-counselors

Note. This table is adopted and modified from Choi's (2008) thesis.

male students, hope is associated negatively with career barriers and positively with career preparation behaviors. According to Choi (2006), when individuals possess a high level of hope, they tend to perceive career barriers less frequently. This aspect related to career might reflect the future component of hope. Since both hope and career concern about future events, the effort to connect hope with career can be natural to be explored in hope

research.

Furthermore, Hong (2006) reported that hope is correlated negatively with the internet game addiction tendency, and Oh (2006) proposed that hope and attachment with parents and friends are positively correlated, r=.28, p<.01 with parents, r=.21, p<.05 with friends. There are some other research concerns on hope using samples other than university students in Korea. For example, Kim,

J-Y. (2005) conducted hope study among school teachers and investigated the difference between high hope teachers and low hope teachers and its consequential teaching styles. According to the result, teachers with high hope adopted a communication-based teaching style, known as the desirable one, whereas low hope teachers showed a permissive teaching style, which can be connected to indifferent teaching style. Also, Kim, H. (2005) dealt with mothers of children who were counseled in play therapy in her hope research. As mothers' hope levels increase, they tend to be satisfied with their therapy outcomes.

In short, the hope research in Korea is not much in its amount, but the number and concerns are increasing, and it is about to settle down as a worthwhile positive psychological construct to examine. Thus, it is right time to reconsider that this hope research takes the correct direction to proceed in the present.

#### Limitations of hope research in Korea

means to have hope or what hope really means in each context, the papers just tried to examine the relations among other constructs, such as self-esteem, depression, adjustment, and addiction, and hope superficially. This might reflect the recently expanding concern for hope, but we have to urge to build the sound theoretical background, investigating how to understand hope in a psychological context. Therefore, a theory-driven paper about hope is on demand in a timely manner.

Furthermore, as we can see from Table 2, all the hope research conducted in psychology in Korea uses Snyder's hope scale without critical reconsideration. As mentioned earlier, the scale is full of cognitive wordings, barely

bearing the emotion and future components of hope (See Table 1). It is understandable that hope research in Korea has emerged along with the positive psychological movement, in which the theory of Snyder is prevalent. However, considering the hope literature and the deficiency of the scale in standing for the original meaning of hope, conceptualizing comprehensive meaning of hope is necessary for the settlement of sound hope research. This limited use of scale links to the application problem as briefly mentioned in the previous part. For example, in Kim's paper (2004), he concluded that hope plays a significant role in differentiating between maladjustment group and resilient group of adolescents. However, since he uses Snyder's hope scale to measure the level of hope, this actually means that high hopers are the individuals who are good at conducting the hopeful thinking process toward goal attainment. We cannot conclude that the high hope individuals are affectively healthy as well in reality. Nevertheless, the researchers just use the word "hope" without specifying its meaning, The research results summarized above show us the and thus there is a high probability of misleading and hope concept in Korea is used for the connection with confusing readers in terms of hope. Despite the scale various other constructs. Even though we briefly reviewed items that people barely intuitively guess whether they some results of hope research in Korea, the main point measure hope or not, Korean hope researchers use here is that all the papers did not deal with the nature Snyder's hope scale without caution. We hope this paper of hope itself in depth. Without considering what it could inspire more researche rs to seek the underlying dimensions and nature of hope and to make a fundamental base of hope research.

#### **Future Directions**

Considering the insufficiency of Snyder's hope theory and the acceptance without criticism in Korean hope research, we would like to suggest the future direction of hope study in Korea based on comprehensive conceptualization and implications.

First of all, we propose to add new components on top of the cognition-based hope theory in conceptualizing the hope process. Here, we emphasize that Snyder' hope theory is very superb and should be respected in that it

cognitive revolution in the history of psychology. From comes in the Snyder's lists of books on cognition and emphasis on the prominent role of it, we could easily imagine how deeply Snyder was attracted to the function of cognition. He believes that the emotion is reactive in nature and places the "thinking ability" on the heart of hope. Of course, he admits the emotion is an important part of hope, but it is treated as contributory, not as core as cognition (Snyder, 2002). However, as we discussed thus far, the interaction of cognition and affects are important when we hope (Staats, 1985). Without the cognition part, hope might look like just optimistic and happy feelings, and without the emotion part, hope would seem like self-efficacy or coping toward goal attainment. In order to describe the authentic comprehension of hope, the integration of cognition and emotion is warranted. Moreover, the explicit expressions about future seem to be crucial in picturing hope. The representative feature of hope was that it was future-oriented feeling (Bruininks & Malle, 2005). Thus, in a revised hope theory, we would add some emotion and future expressions, such as happy about future happenings, very pleased to embrace future events, or not afraid of what might happen in the future. These specific affective wishing expressions for the future could represent the emotion part in the hope process.

In addition, to make the hope theory more comprehensive, we believe the model should include social aspects of hope. The societal component of hope is important since people not only have hope for themselves individually but also have hope for society. Many researchers discussed the concept of hope in a societal level. Averill et al. (1990) suggested that hope can be comprehended in a social and cultural framework. Especially, Staats (1985) utilized the societal aspect of hope in her scale,

made concern for hope flourish in research area and The Hope Index. She highlighted the interaction of offered the new perspective of hope, generating the cognition and affects in hope, and The Hope Index was concept of pathway thinking and emphasizing cognitive originally created to complement the cognition aspect of role in the hope process. In the introduction part of hope which was lacking in the affect-oriented hope Snyder's paper on hope, he briefly mentioned about the measurement, Expected Balance Scale. The social parts

item contents. Scrutinizing the scale, the items are based on the self-other-world triad and ask how much people emotionally wish and cognitively expect on the items (Staats, 1985). The items related to social aspects include justice in the world, peace in the world, personal freedom, and resources for all. The fact that the items include social factors implies that hope concept is involved in a societal level. Actually, the items were created by asking people to enumerate settings or things which they hoped for. It means when people consider hope, they consider hope not only for individuals but also for the world. Even Snyder himself also mentioned about the notion of collective hope. For example, Snyder and Feldman (2000) mentioned that one can hope for something in a societal level when the majority of people need to join together to help one another for a macro-level goal. Nevertheless, no social component of hope were reflected in Snyder's hope theory. More effort is called for toward the inclusion of the social hope to reflect a comprehensive picture of hope.

Finally, a new comprehensive hope scale is necessary to be created based on Snyder's hope theory and other main components of hope suggested thus far. To be more specific, we suggest four subfactors of the comprehensive hope scale : agency thinking, pathway thinking, emotion, and social hope, and the items should include all the wordings related to the four main components. Even though it is yet to specify the whole item wordings now, the items need to reflect the following concepts. First, since Snyder and his colleagues contributed to emphasizing the cognitive aspects and well specified it with agency and pathway thinking as shown in Table 1, it would be proper to keep the items as the cognition part with some more explicit expressions of future. Second,

the emotion part would borrow some item expressions from the affect-oriented hope scale, the EBS, such as happy about future happenings, very pleased to embrace future events, or not afraid of what might happen in the future. Lastly, the societal level of hope could use some concepts from The Hope Index, such as justice in the world, peace in the world, personal freedom, and resources for all. Some pilot studies are needed to see if more components of hope should be considered. With scrutinized items generated, validation studies can follow for future research.

#### Concluding Remarks

that it describes and measures the subjective features of hope theory as well as the research hope particularly well in cognitive aspect. The point we want to make here is that the theory partly lacks some core elements of hope, such as emotional and future aspects of hope. Thus, Snyder's hope theory needs to be redefined and modified. Interestingly enough, every hope research in psychology in Korea utilizes Snyder's Hope Scale without one single exception (Choi, 2008). In spite of all the limitations mentioned in the several literatures about Snyder's hope theory and the fact that there are other several sound scales to measure hope, the hope research in Korea accepts only Snyder's hope theory as it is without any reassessment of its conceptualization and measurement. This surely is a concern. Therefore, we want to underscore that it is high time to raise the definitional issue of hope shown in Snyder's theory and to request for a more comprehensive application of hope. Although hope cannot be redefined as one sentence, it is certain that it needs to contain the main components we have addressed in this review, which are cognition, emotion, future, and social elements. Thus, hope can be

redefined in our terms as the interaction of efficient thinking and positive feeling about future goals that will occur and influence in personal and social levels. In this way, hope can contain more comprehensive outlook, adding affective, social, future components with the reflection of original meaning and nature of hope, although the redefinition is subject to further validation in our future research.

More research is warranted in redefining hope. One promising research direction is to redefine the definition of hope as we suggested thus far and develop a more comprehensive measure of hope along with an effort to uncover underlying dimensions of hope. Another research As we have discussed above, the conceptualization of effort may be directed toward cross-cultural comparisons hope by Snyder and his associates fails to reflect the in terms of the definition, components, and role of hope comprehensive meaning of general hope. Again, it should and their components. To conclude, we have briefly be noted that we do not want to ignore the contribution examined the history of hope research in the light of of Snyder's theory. Snyder's hope theory is sound in positive psychology, provided a critical review of Snyder's trend of hope in Korea. We are hopeful that this review can facilitate the development of a more comprehensive hope theory and its application across cultures.

#### REFERENCES

Aspinwall, L. G. (1998). Rethinking the role of positive affect in self-regulation. Motivation and Emotion, 22, 1-32.

Aspinwall, L. G. (2001). Dealing with adversity : Selfregulation, coping, adaptation, and health. In A. Tesser & N. Schwarz (Eds.), Blackwell handbook of social psychology: Intraindividual processes (pp.591-614). Malden, MA: Blackwell.

Aspinwall, L. G., & Leaf, S. L. (2002). In search of the unique aspects of hope: Pinning our hopes on Positive Emotions, Future-oriented thinking, hard times, and other people. Psychological Inquiry, 13, 276-321.

Averill, J. R., Catlin, G., & Chon, K. K. (1990). Rules

- of hope. New York: Springer-Verlag.
- Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The hopelessness scale. *Journal of Consulting and Clinical Psychology*, 42, 861-865.
- Breznitz, S. (1986). The effect of hope on coping with stress. In M. H. Appley & P. Trumbull (Eds.), *Dynamics of stress: Physiological, psychological, and social perspectives* (pp.295-207). New York: Plenum Press.
- Bruininks, P., & Malle, B. F. (2005). Distinguishing hope from optimism and related affective states. *Motivation and Emotion*, 29, 324-352.
- Carver, C. S., & Scheier, M. F. (1999). Optimism. In C. R. Snyder (Ed.), *Coping: The psychology of what works* (pp.182-204). New York: Oxford University Press
- Choi, D. O. (2005). The effect of agency and pathway on achievement expectancy and depression/anxiety related emotion. Doctoral dissertation, Hanyang University, Seoul. [Korean]
- Choi, H-J. (2006). The influence of hope and achievement goals on career aspiration and career preparation behavior. Master's thesis, Catholic University, Bucheon. [Korean]
- Choi, Y-H. (2008). Validation of the hope scale. Master's thesis, Catholic University, Bucheon [Korean].
- Cramer, K. M., & Dyrkacz, L. (1998). Differential prediction of maladjustment scores with the snyder hope subscales. *Psychological Reports*, 83, 1035-1041.
- Curry, L. A., & Snyder, C. R. (2000). Hope takes the field: Mind matters in athletic performances. In C. R. Snyder (Ed.), *Handbook of hope: Theory, measures, and applications* (pp.243-260). San Diego, CA: Academic.
- Curry, L. A., Snyder, C. R., Cook, D. L., Ruby, B. C., & Rehm, M. (1997). The role of hope in studentathlete academic and sport achievement. *Journal of*

- Personality and Social Psychology, 73, 1257-1267.
- Hong, Y. Y. (2006). Influence of hope and academic achievement goal orientation on adolescent's the internet game addiction. Master's thesis, Catholic University, Bucheon. [Korean]
- Hsee, C. K., & Abelson, R. P. (1991). Velocity relation: Satisfaction as a function of the first derivative of outcome over time. *Journal of Personality and Social Psychology*, 60, 341-347.
- Kang, L. Y. (2002). Development and application of counseling process hope scales. Doctoral Dissertation, Sungkyunkwan University, Seoul. [Korean]
- Kim, H. S. (2005). Effect of object relations level and hope level about client's mother on parent counseling satisfaction. Master's thesis, Catholic University, Bucheon. [Korean]
- Kim, J-Y. (2005). The influences of teachers' hope and empathy on self-esteem, job satisfaction, and discipline styles. Master's thesis, Catholic University, Bucheon. [Korean]
- Kim, K-O., & Cho, B-H. (2001). The correlation between perceived social support and hope of stroke survivors. *The Korean Journal of Rehabilitation Nursing*, 4, 58-72. [Korean]
- Kim, M-S. (2004). The effect of attachment, negative thinking, hope and self-esteem on depression. Master's thesis, Hanyang University, Seoul. [Korean]
- Kim, N-H. (2006). The effects of hope, social support, and coping strategies on psychological well-being. Master's thesis, Catholic University, Bucheon. [Korean]
- Kim, S. J. (2005). The influence of career barriers, hope and career decision-making self-efficacy on the career preparation behavior of college students.

  Doctoral Dissertation, Hongik University, Seoul.

  [Korean]
- Kim, T-H., & Kim, J-H. (2004). The effects of hope and meaning of life on adolescents' resilience. *The Korean Journal of Counseling and Psychotherapy*,

- 16, 465-490. [Korean]
- Lee, H-J. (2007). The effects of hope and empathy on the psychological well-being of adolescents: Focusing on peer relationships. Master's thesis, Catholic University, Bucheon. [Korean]
- Lee, M-O., & Ha J-H. (2006). Coping style, separationindividuation and hope on marital adjustment in married women. *The Korean Journal of Woman Psychology, 11*, 477-496. [Korean]
- Lopez, S. J., Snyder, C. R., & Pedrotti, J. T. (2003).

  Hope: Many definition many measures. In S. J.

  Lopez & C. R. Snyder (Eds.). Positive Psychological

  Assessment: A handbook of models and measures
  (pp.91-107). Washington, DC: American Psychological Association.
- Magaletta, P. R., & Oliver, J. M. (1999). The hope construct, will and ways: Their relative relations with self-efficacy, optimism, and general well-being. *Journal of Clinical Psychology*, 55, 539-551.
- Marcel, G. (1962). *Homo Viator : Introduction to a meta*physics of hope (E. Crawford, trans.). New York : Harper & Row.
- Menninger, K. (1959). The academic lecture on hope. The American Journal of Psychiatry, 109, 481-489.
- Mowrer, O. H. (1960). *Learning theory and behavior*. New York: Wiley & Sons.
- Oh, H-J. (2006). The relationship among attachment with parents and friends, hope, and delinquency of Juveniles. Master's thesis, Dankook University, Seoul. [Korean]
- Onwuegbuzie, A. J., & Snyder, C. R. (2000). Relations between hope and graduate students' studying and test-taking strategies. *Psychological Reports*, 86, 803-806.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.
- Seligman, M. E. P. (2002). Positive psychology, positive

- prevention, and positive therapy. In C. T. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp.3-9). New York: Oxford University Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000).

  Positive psychology: An Introduction. *American Psychologist*, 55, 5-14.
- Snyder, C. R. (1994). The psychology of hope: You can get there from here. New York: Free Press.
- Snyder, C. R. (1995). Conceptualizing, measuring, and nurturing hope. *Journal of Counseling and Devel*opment, 73, 355-360.
- Snyder, C. R. (2002). Hope theory Rainbows in the mind. *Psychological Inquiry*, 13, 249-275.
- Snyder, C. R. (2004). Hope and depression: A light in the darkness. *Journal of Social and Clinical Psychology*, 23, 347-351.
- Snyder, C. R., Cheavens, J., & Sympson, S. C. (1997).

  Hope: An individual motive for social commerce.

  Group Dynamics: Theory, Research, and Practice,
  1, 107-118.
- Snyder, C. R., & Feldman, D. B. (2000). Hope for the many: An empowering social agenda. In C. R. Snyder (Ed), *Handbook of hope: Theory, measure,* and applications. CA: Academic Press.
- Snyder, C. R., Feldman, D. B., Taylor, J. D., Schroeder, L. L., & Adams, V. III. (2000). The roles of hopeful thinking in preventing problems and enhancing strengths. *Applied and Preventive Psychology*, 15, 262-295.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., & Irving, L. M., et al. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60, 570-585.
- Snyder, C. R., & Lopez, S. J. (2007). Positive Psychology: The scientific and practical explorations of human strengths. CA: Sage Publications.
- Snyder, C. R., & Pulvers, K. (2001). Dr. Seuss, the

- coping machine, and "Oh, the places you will go." Im C. R. Snyder (Ed.), *Coping and copers:* Adaptive processes and people (pp.3-29). New York: Oxford University Press.
- Snyder, C. R., Sympson, S. C., Michael, S. T., & Cheavens, J. (2000). The optimism and hope constructs: Variants on a positive expectancy theme. In E. C. Chang (Ed.), *Optimism and pessimism* (pp. 103-124). Washington, DC: American Psychological Association.
- Snyder, C. R., Wiklund, C., & Cheavens, J. (1999, August).
  Hope and success in college. Paper presented at the American Psychological Association, Boston.
- Song, E-H. (2006). The effects of attachment styles, coping strategy, hope on social anxiety. Master's thesis,

- Catholic University, Bucheon. [Korean]
- Staats, S. (1989). Hope: A comparison of two self-report measures for adults. *Journal of Personality Assessment*, 53, 366-375.
- Staats, S. R., & Stassen, M. A. (1985). Hope: An affective cognition. *Social Indicators Research*, 17, 235-242.
- Stechynsky, A. (1999, January). *The role of hope in career counseling*. Paper presented at National Consultation on Career Development, Ottawa.
- Stotland, E. (1969). *The psychology of hope*. San Francisco, CA: Jossey-Bass.

 $http \ \hbox{$:$//dictionary.reference.com/browse/hope}$ 

http://www.oed.com

韓國心理學會誌: 社會 및 性格

Korean Journal of Social and Personality Psychology

2008, Vol. 22, No. 2, 75~92

## Snyder의 희망이론을 넘어서: 희망의 재발견과 새로운 희망척도의 필요성

### 기쁘다 이동귀 김혜영 연세대학교

이 개관 논문은 긍정심리학적 변인으로 주목 받고 있는 희망을 소개한다. 여태까지 진행되어 온 다양한 희망 개념에 대해서 살펴보았고, 최근 가장 각광받고 있는 Snyder의 희망 이론에 대해서도 상세히 분석하였다. 그 결과, Snyder의 희망 모델이 여러 가지 제한점을 갖고 있음을 시사했다. 첫째, Snyder의 희망 이론에서는 주도사고, 경로사고, 목표 달성에 중점을 두고 정의를 내리고 있는데, 이는 "희망"이라는 개념이 가진 본질적 의미와 다르다. 둘째, Snyder의 희망 이론에서 제안하는 희망의 주요 구성개념에는 정서, 미래의 요소가 결여 되어있다. 셋째, Snyder가 제작한 측정 도구가 Snyder의 희망 이론 자체를 잘 반영하고 있지 못할 뿐 아니라, 일반적인 의미의 희망을 측정하지 못한다. 마지막으로, 이렇게 협의적인 정의에 의한 희망 이론으로 인하여 Snyder의 희망 이론을 근거로 한 희망 연구의 결과를 광의적으로 적용하는 데에 문제가 있을 수 있다. 이 논문은 이런 제한점들을 근거로 희망 연구가 한국에서는 어떻게 진행되고 있으며, 앞으로 나아가야 할 방향은 어떤지를 제안하고 있다.

주요어: 긍정심리학, 희망

1차원고 접수일: 2008년 5월 5일 수정원고 접수일: 2008년 5월 23일

게재 확정일 : 2008년 5월 23일