

## Suggesting Coping Strategies for the Various Stresses from Body Weight in Korean Males -A Qualitative Approach-

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### Abstract

This study investigates coping strategies of overweight or underweight males in Korea. For this purpose, the authors identify types of stress related to weight management. A qualitative method was utilized to collect the data related to successful weight management experiences of males aged 20-37 years. Data were analyzed based on a motivation theory of coping, which suggests coping strategy elements. The results of this study identified the stress related to weight: dissatisfaction with appearance, others' disapproval of appearance, health problems, weaker athletic ability, negative self-perception, passiveness about appearance, lower romantic attractiveness, others' disapproval of lower romantic attractiveness, weakened task execution capability, and negative stereotypes about task execution capability. In addition, six coping strategies were suggested: improved appearance, improved physical function, improved positive self-perception, more choices to improve appearance, enhanced romantic relationship, and enhanced job performance. This study shows that weight problems in modern society are diverse and complex. Therefore a man who has abnormal weight needs to clarify his stress first and then proposes strategies that are appropriate for each type of stress.

**Key words:** Stressor, Overweight, Underweight, Weight management, Coping strategy

### I. Introduction

Weight issues seem to be strongly linked to the perception of appearance since the media consistently focuses on weight management to achieve an ideal body shape (Derenne & Beresin, 2006; Frederick et al., 2016). In a survey asking about the purpose of managing weight, appearance management was reported as the highest priority in Korea for both genders (Embrain, 2016).

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The rate of sales for men's appearance management tools is rapidly increasing while the rate for women's is maintained or decreasing every year in Korea (Kim, 2015). Recently, interest in appearance has risen for Korean men, even though their interest in appearance has been relatively weak compared to Korean women and men in other Western countries (Min, 2017). For your information, men from Western cultures are typically very interested in building muscles to reach the ideal male body (Leone et al., 2005).

However, weight issues cause many other problems besides concerns of appearance (Mostofsky, 2014). Being overweight or underweight contributes to a many health problems such as heart disease, diabetes, stroke,

and some types of cancer which restrict well-being in everyday life (Flegal et al., 1998; Pi-Sunyer, 1993). Being overweight and underweight also contributes to psychological bias as people may perceive that an overweight man lacks patience and an underweight man lacks physical strength. These psychological biases may restrict active social activity (Frederick et al., 2016). Therefore, focusing on single stress such as appearance does not mean to solve all weight problems.

A weight management perspective that focuses only on appearance ignoring other weight-related issues is problematic. For example, if a physician recommends weight loss to an overweight patient to improve his or her health, but the patient has a liposuction procedure only for appearance, it could lead to a new type of stress that may threaten the person's health after weight loss. In addition, some men may engage in excessive exercise to improve their appearance but then could experience side effects such as reverse anorexia, bigorexia, or muscle dysmorphia (Jeon, 2018; Leone et al., 2005). Therefore, it is necessary to examine multiple weight problems and to suggest the appropriate direction for weight management that takes this complexity into consideration.

Researchers have proposed solutions for complex problems using strategies for coping with stress (Dardas & Ahmad, 2015; Robb, 2000). Coping strategies are defined as the direction that can improve an individual's current situation by eliminating stressors (Dardas & Ahmad, 2015; Skinner & Wellborn, 1994). Skinner and Wellborn (1994) suggested the motivational theory of coping model to verify stressor and the direction. Her follow-up studies identified the coping strategies based on this model in the various theme and classes (Gaylord-Harden et al., 2010; Hagan et al., 2017; Robb, 2000). In this study, we also propose coping strategies for various stresses specifically related to body weight.

We analyze types of stress for men based on successful weight management cases and propose various strategies for weight management. For this purpose, we focus on Korean men because Korean males have traditionally been less interested in improving their appearance than females. Societal bias against men who focus on appearance in Korea implies weaker

masculinity (Lee & Lee, 2009). According to Baek (2009), Korean culture has stricter sociocultural stereotypes toward gender roles than Western culture because it is influenced by Confucian ideology. These stereotypes influence Korean males in that they may believe that focusing on their appearance could weaken their masculinity. Thus, a study of Korean men could help suggest more options for weight-related stress. Finally, the purpose of this study is to offer coping strategies for Korean men who suffer from weight-related stress. The authors aim to identify the types of stress related to weight and then identify outcomes after successful weight management based on the motivational theory of coping model.

## **II. Literature Review**

### **1. Body Weight and Stress**

Stress is defined as a circular process of negative perceptions, reactions, and behaviors based on environmental need (Stranks, 2005). Stress is frequently caused by pressure to manage weight (Kwon, 2008). In addition, repeated stress can decrease attention, exercise cognitive psychological-physiological activities, and these side effects of stress are equally evident in the stress related to weight. (Choi & Choi, 2008; Lazarus & Folkman, 1984; Torres & Nowson, 2007).

Scholars in several fields including healthcare and nutrition have suggested a normal weight range to maintain a healthy body. This ideal weight is calculated considering the individual's height, gender, and age (Korean Society for the Study of Obesity, n.d.; Kuk et al., 2009). Men who exceed or fall below this normal weight range are diagnosed as overweight or underweight. In modern society, overweight men experience stress as much as overweight women, and underweight men feel stress because they are different from the ideal male body (Moon, 2018; Park, 2015).

Stress related to overweight or underweight is diverse and complex. Being overweight is related to several diseases such as heart disease, diabetes, stroke, and some types of cancer (Flegal et al., 1998; Pi-Sunyer, 1993), and being underweight due to eating disorders leads to nutritional imbalance (Monteleone et

al., 2016). The ideal body also leads to a sociocultural obsession with maintaining a normal weight (Lindeloof et al., 2010). The complications related to health and social bias related to weight are becoming common stress factors in modern society (Malterud & Ulriksen, 2011). Anxiety about health may cause confusion in daily life. Social bias could cause individuals to limit their social relationships. Individuals who do not have a normal body weight could also experience both anxieties about health and fear of social bias.

Several weight management methods are commonly recommended to manage body weight including activities such as exercise, diet, and medication based on the own strategies (Park et al., 2004). Exercise may include repeated physical activities such as jogging, jumping rope, and swimming (Carless & Douglas, 2008). Dieting restricts the types and quantity of food, and relevant activities include calculating calories and restricting the consumption of carbohydrates (Fyler et al., 2014). Another method, taking medicine, reduces appetite or helps burn off fat (Valente et al., 2016). As a result of weight management methods, both psychological and physical status change (Mostofsky, 2014).

Weight management method that addresses only one type of stress causes other types of stress. For example, eating one kind of food for weight loss could lead to poor health (Hagen et al., 2016), and an unbalanced diet could result in depression (Werntz et al., 2016). Moreover, weight management only to improve appearance is gaining popularity and the side effect could lead social problems (Derenne, & Beresin, 2006; Frederick et al., 2016; Leone et al., 2005). These studies show that weight management should be able to cope with multiple stresses on weight issues (Dempsey, 2002; Gaylord-Harden et al., 2010).

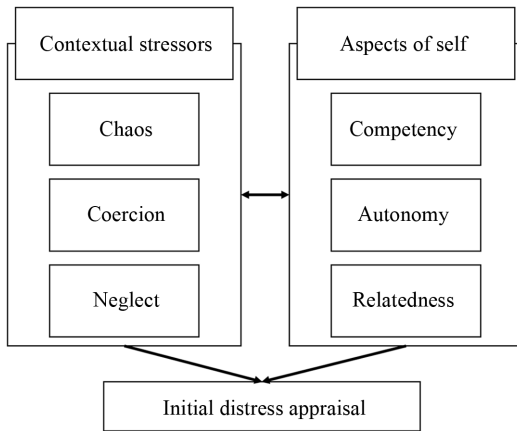
Therefore, it is necessary to know what types of stress we experience before finding out an effective weight management method. However, there are limited efforts to find out how various stresses are associated with weight issues, compared to studies that point to negative effects on the single dimension.

## 2. Motivation Theory of Coping

Skinner and Wellborn (1994) explained the reasons

environmental demands are perceived as threats by identifying three “contextual stressors”: neglect, chaos, and coercion. Neglect is an element that (1) threatens social relationships among community members; (2) creates chaos, an element of confusion that causes doubt about self-competence; and (3) increases coercion, an element that reduces the individual's right to choose (Skinner & Wellborn, 1994). They also asserted that the individual must strengthen three “aspects of self”: relatedness, competency, and autonomy to cope with these three contextual stressors. (1) Relatedness refers to a state in which people generate and increase sympathy through social relationships. (2) Competency refers to a state in which people can eliminate confusion by restoring confidence. (3) Autonomy is a state in which people have more rights to choose for themselves than in the past.

Skinner and Wellborn's (1994) follow-up studies, proposed coping strategies based on the elements that minimize contextual stressors or maximize aspects of the self (Robb, 2000). In particular, Robb (2000) categorized the contextual stresses and the aspects of self. For example, she classified the absence of supportive adults (neglect) as a contextual stressor and interaction (relatedness) as an aspect of self. Next, she suggested building a child's sense of security as a coping strategy to reduce the absence of support (neglect) or to strengthen the interaction (relatedness). The detail process of how to identify coping strategy for this study is demonstrated in the categorization of qualitative data section below. Hagan et al. (2017) also identified high suppression for adults as a coping strategy in the relationship between a parent's excessive control and verbal flexibility. Gaylord-Harden et al. (2010) analyzed the contextual stressors to suggest strategies for coping with low-income communities in workable strata. Also, Ibañez et al. (2004) interviewed adult males and suggested that coping strategies which derived from efforts to escape the stressful environmental demands. Although the motivational theory of coping model is not often applied to weight issues in prior studies, these studies show that this model could apply to various class and many issues. This study also uses a modified motivational theory of coping model, as shown in <Fig. 1>. Based on that model,



**Fig. 1. The modified model of motivational theory of coping.**

From Robb. (2000). p. 120.

this study categorizes the contextual stressors and aspects of self related to weight issues and also proposes coping strategies based on the relationship between contextual stressor and aspect of self.

When we put the above together, the following research objectives were developed to:

- (1) Determine the contextual stresses and aspects of self related to body weight for overweight or underweight males in Korea.
- (2) Clarify the coping strategies that overweight or underweight males in Korea use to relieve weight-related stress.

### III. Methods

The types of stress vary from person to person since perceived stress is different for each (Radcliffe & Lester, 2003). Qualitative research is used to observe perceived stress related to a specific topic. This study also conducted qualitative research to determine the personal stress concerns related to weight problems (Radcliffe & Lester, 2003; Rout, 1996). To avoid the precariousness of one qualitative research method and enhancing data richness, the final data were collected using both in-depth interviews and content analysis (Hall & Rist, 1999; Lambert & Loiselle, 2008) after the IRB approved.

#### 1. In-depth Interviews

This study recruited Korean males who had overcome their weight problems using weight management strategies. We used snowball sampling to recruit participants for the in-depth interviews. Tang et al. (2017) used snowball sampling as a non-probability sampling technique in which existing participants recruit future participants who are appropriate for the study from among their acquaintances. A total of ten Korean males were recruited for in-depth interviews that lasted 50-75 minutes. The first author of this study, who is male, completed all ten one-on-one interviews because Gubrium and Holstein (2001) noted that same-gender interviewer/interviewee pairs are more effective than those of mixed genders when it comes to research topics related to personal privacy including body issues. Park (2012) also surveyed 81 qualitative researchers in Korea and found that 6-10 people had the highest number of research participants. In this study, 10 men were interviewed. The male researcher shared the results of the interviews with the co-authors to overcome any potential shortcomings of having a single researcher conduct the interviews, and then all of the researchers discussed the future progress of the interviews. All of the participants had experienced either a weight gain of more than 7kg (around 15.43 lb) or a weight loss of more than 10kg (around 22.05 lb) and perceived that their weight management was successful. The participants demonstrated their weight change from photographs or written records. <Table 1> illustrates the basic profiles of the participants. The interviews were conducted based on semi-structured questionnaires. <Table 2> presents the content of the questionnaires, which included demographic information, the weight management methods used, the perception of their weight, and reactions from acquaintances about their weight after their weight management. The in-depth interview was recorded after consent from the participants, and all recordings were dictated by Microsoft Word program.

#### 2. Content Analysis

For the content analysis, this study selected online

**Table 1. Information about in-depth interview participants**

ID	Age	Variation	Weight Management Methods
1 John	20	Lost 10kg	Personal training, Diet
2 Ray	25	Lost 15kg	Basketball, Diet
3 Joey	20	Lost 25kg	Personal training, Diet
4 Andy	26	Gained 7-8kg	Personal training, Diet
5 Russ	22	Gained 15kg	Fitness center, Change daily habits
6 Alex	33	Lost 10kg	Jogging, Diet
7 Kevin	37	Lost 18kg	Personal training, Diet
8 Matt	26	Lost 40kg	Fitness center, Diet
9 David	24	Lost 30kg	Walking, Change life habits
10 Sam	26	Lost 17kg	Jogging, Diet

**Table 2. Semi-structured questionnaires of in-depth interviews**

Domain	Questions
Demographic information	Gender / Age / Occupation
Experience of weight management	What method(s) did you use to gain/lose weight? Would you like to tell me about your change in weight?
Perceptions of their weight	Are you satisfied with your weight change? What did you think about yourself before/after managing your weight? Did you ever check the effect of your weight management during the process? How did you feel during the interim check?
Reactions from acquaintances about their weight	How did other people react before/during/after your weight gain/loss?

communities related to weight management in which users post their experiences related to their weight management. First, the authors searched for online communities interested in health, diet, or weight management for Korean males on the most representative portal platforms in Korea based on the rate of visit (Internettrend, 2016). This Internet community on the portal sites is a cyberspace where people with common interests communicate with each other and share their experiences or related information (Lee & Jung, 2009). Second, we selected three of the most widely used online communities based on the number of community members. Additionally, one more online community that focuses on underweight individuals was included to analyze the experiences of underweight individuals. Therefore, a total of four online communities were finally selected for the content analysis.

The authors selected postings which is full disclosure level for analysis that described what weight management method was used, how much weight change they experienced and how the situation and emotions

changed. However, postings with insufficient information about the weight management method they used, postings about experiences of others, or advertisements were excluded. The authors selected postings that a writer is male. A total of 76 postings were chosen for the content analysis. <Table 3> presents detailed information about the online communities. Every content was moved to Microsoft Word program.

### 3. Categorization of Qualitative Data

The authors analyzed the in-depth interviews and the online communities' resources. First, the authors confirmed that they had a shared understanding of the principles of the three contextual stressors (i.e., chaos, coercion, and neglect) and the three aspects of self (i.e., competency, autonomy, relatedness). The concept of the three contextual stressors becomes a criterion for categorizing stress related to weight and the concept of the three aspects of self become a criterion for categorizing outcomes of weight management.

**Table 3. Information of online communities for contents analysis**

Online Community ID	Name of the Bulletin Board	Number of Selected Postings	Number of Members
Community 1	Success stories of weight management	16	379,219
Community 2	A whole new world after weight management	24	767,133
Community 3	Success stories of weight management	26	135,030
Community 4	Photo board: Before and after weight loss	10	32,179

Next, each author classified the content as a contextual stressor, aspect of self, or coping strategy. For instance, the comment, “When I was in high school, I was really obese. You see, when I saw myself in a mirror back then, I couldn't deny that I was obese and kept thinking about losing weight” was classified as a contextual stressor with the characteristic of chaos and named it “dissatisfaction with appearance” because the participant's self-competence was weakened by abnormal weight. Another comment, “It would be nice to see that line show up, and to see abdominal muscles after that (exercise),” was categorized as an aspect of self related to competency, and it was named “appearance change” because the participant's self-assurance was strengthened through his improved appearance from weight management. If the participants explained those cases together it was classified as “appearance improvement” as one of the coping strategy related to weight. Third, the authors confirmed the six coping strategies, ten contextual stressors, and ten aspects of self after they shared and revised the results of the categorization. Intercoder reliability was calculated as the percentage of the two authors' agreement for each category of contextual stressors and the aspect of self and coping strategies. The reliability was between 92.71% and 98.97% for every step.

#### IV. Results

This study examined the coping strategies used to address weight issues, based on the motivational theory of coping model for overweight or underweight males in Korean. The comments from the interviews and online content were categorized into contextual stressors and aspects of self. The coping strategies are based on the contextual stressors or aspects of self. A total of six coping strategies were identified from the

results of the in-depth interviews, the content analysis of and the online communities. <Table 4> summarizes the contextual stressors, aspects of self, and coping strategies.

##### 1. Improved Appearance

Improved appearance refers to changes in appearance due to weight management. The participants reported that their improved appearance reduced their dissatisfaction with their appearance or strengthened their self-competence. This result is consistent with previous literature that changes in appearance are effective for relieving stress (Heron et al., 2015). In the in-depth interview with Joey (in-depth interviewer 3), he discussed his perceptions of his improved appearance. One of the posts from an online community member also discussed his experience with changes in his body.

*“It would be nice to see that line show up, ... I am pretty motivated, and it makes me feel great, obviously. ... When I was in high school, I was really obese. When I saw myself in a mirror back then, I couldn't deny that I was obese and kept thinking about losing weight”* (Joey, in-depth interviewer 3)

*“When I see the change in my body, I want to take care of my body more, and sometimes I feel happy to see myself”* (Community 1)

The participants also reported that their improved appearance changed the reactions of people around them. These improvements reduced the participants' feeling of neglect and improved their social relationships. In an in-depth interview with Kevin (in-depth interviewer 7), he mentioned that the attitude of his daughter, who was previously ashamed of his appearance, became more positive after he had made successful weight management.

**Table 4. Coping strategies, contextual stressors, and aspects of self for weight-related issues**

Contextual Stressors	Aspects of Self	Coping Strategies
Dissatisfaction with appearance (Chaos)	Appearance changes (Competency)	Improved appearance
Others' disapproval of appearance (Neglect)	Approval of others on appearance changes (Relatedness)	
Health problems (Chaos)	Health recovery (Competency)	Improved physical function
Weaker athletic ability (Chaos)	Improved athletic ability (Competency)	
Negative self-perception (Chaos)	Feeling of achievement (Competency)	Improved positive self-perception
Passive about appearance (Coercion)	Active appearance management (Autonomy)	More choices to improve appearance
Lower romantic attractiveness (Chaos)	Higher romantic attractiveness (Competency)	Enhanced romantic relationship
Others' disapproval of lower romantic attractiveness (Neglect)	Others' approval of enhanced romantic attractiveness (Relatedness)	
Weakened task execution capability (Chaos)	Strengthened task execution (Competency)	Enhanced job performance
Negative stereotypes about task execution capability (Neglect)	Relieved stereotypes about task execution (Relatedness)	

*"My daughter doesn't tease me. We go out together or ride a bike together. We spend more time together than before"* (Kevin, in-depth interviewer 7)

## 2. Improved Physical Function

Improved physical function refers to the recovery of physical ability due to weight management. The participants reported that making these improvements reduced their doubts about their physical function. This result is consistent with a previous study in which enhanced physical function helped relieve stress (Kerr, 1993). In an in-depth interview, Matt (in-depth interviewer 8) described his experience with improved health.

*"I'm sure I got healthier and lighter. My knees are not in pain anymore"* (Matt, in-depth interviewer 8)

*In addition, a post in an online community read, "I feel no pain in my knees. I was very worried about the physical strength of my knees"* (Community 1)

The improved physical function also refers to the development of athletic ability. Being overweight or underweight made participants question their athletic ability, but their improved physical function made them more active. Russ (in-depth interviewer 5) noted the improvement in athletic performance by increasing his physical function. John (in-depth interviewer

1) also talked about his improved stamina.

*"Even when I played soccer, I was always weak and my legs were very sore. So, I used to just like watching soccer before"* (Russ, in-depth interviewer 5)

*"It was normal for me to be exhausted at some point during the exercise, but now I can play even more... So, I thought I got stronger after starting to work out"* (John, in-depth interviewer 1)

## 3. Improved Positive Self-perception

Many weight management methods are painful processes that require repeated physical activity. However, the participants' successful performance was effective in developing a positive self-perception (Carless & Douglas, 2008). Based on their sense of accomplishment gained through weight management, overweight and underweight males in Korean escaped from the difficulty of low self-esteem and became more confident in every aspect of their lives. In an in-depth interview, David (in-depth interviewer 9) said: *"I stayed at home even though I wanted to go outside before managing my weight"*. This comment reflects the chaos of low self-esteem. Russ (in-depth interviewer 5), and a post from the online community also stated that they became active in everything based on their new sense of accomplishment.

*"I didn't go outside, not because I didn't want to go outside but*

*because I didn't feel good about how other people would see me" also described how he felt after accomplishment: "Once I felt fulfilled, I think I can do well with whatever I want to do in the future" Russ (in-depth interviewer 5)*

*The online post read: "I feel lighter and fresh. It is like I have the energy to do anything" (Community 1)*

#### 4. More Choices to Improve Appearance

More choices to improve appearance means that the selection of clothes and shopping areas were expanded because of the changes in the participants' body size. These new choices restored the participants' independent ability to manage their appearance (LaBat & De-Long, 1990). Several participants in the in-depth interviews and a post from the online community expressed their experiences of restoring their ability to choose what they wanted to wear:

*"Now, I can wear that clothing" (Joey, in-depth interviewer 3).*

*"(After weight loss) I spent like one or two hours shopping" (Sam, in-depth interviewer 10)*

*"I wear what I want. I couldn't be happier" (Community 2)*

In an in-depth interview, Russ (in-depth interviewer 5) also described a situation when he could not wear the clothes he wanted when he was underweight. A previous study claimed that this grooming constraint could be a stressor for many males (Yoo et al., 2012).

*"(Before weight gain) I already knew that many clothes wouldn't fit me which made me feel sorry for myself" (Russ, in-depth interviewer 5)*

#### 5. Enhanced Romantic Relationship

Enhanced romantic relationship refers to having sexual confidence in oneself through changes in weight. The participants in the in-depth interviews did not feel that they could appeal to the opposite sex because they believed that their bodies before their weight management did not meet the sociocultural standards that Korean females desired. As a result, they were passive in dating, which became a stressor for these young males. However, changing their body weight increa-

sed their self-confidence in sexual attraction because they believed that after their weight management, they could fulfill sociocultural expectations. This result is consistent with the results of previous studies claiming that an individual's attractiveness could be better expressed through changes in appearance (Markey et al., 2007). Russ (in-depth interviewer 5), who participated in an in-depth interview, responded that his appearance became more attractive and he had confidence in dating.

*"I mean speaking about my appearance, it is impossible to make the first move... (before losing weight) I can get close to a woman who looks attractive and asks her like 'What do you think about me?'. I'm more likely to make the first move now" (Russ, in-depth interviewer 5)*

After succeeding in their weight management, people around them gave them positive responses not only about their appearance but also about their romantic attractiveness. The participants believed that their bodies portrayed a negative image of their dating partner. However, they were given positive appraisals about their sexual attraction, which increased their dating opportunities after they succeeded in changing their weight. Andy (in-depth interviewer 4), who participated in an in-depth interview, as well as in posts from the online community mentioned the differences in people's reactions to their new sex appeal.

*"You know, my friends never introduced girls to me before because they knew that girl wouldn't like me. But after they saw the changes in me, they asked me if I wanted to meet up with girls" (Andy, in-depth interviewer 4)*

*"(After weight management) my female friends told me that I looked great and I was recently asked out by one of the girls" (Community 4)*

#### 6. Enhanced Task Performance

Enhanced job performance refers to better performance at work due to weight management. Being overweight or underweight is one of the main reasons for decreased physical strength (Shen et al., 2006). Alex (in-depth interviewer 6) explained that successful wei-



ght management raised stamina, which, in turn, resulted in better performance.

*"I was really tired in the evening after I had three lessons. But now I go to workout or study more with three lessons. Certainly what? It seems that the physical strength has increased"* (Alex, in-depth interviewer 6)

Enhanced job performance also refers to eliminating my underestimation of my competitiveness due to weight bias. The participants claimed that they were excluded from social activities due to social stereotypes that overweight people are lazy or underweight people are fragile. Kevin (in-depth interviewer 7), an in-depth interviewee, noted that people no longer had the negative perception of him being fat after a successful weight loss. His answer implied that the expectations of people around him regarding his performance were higher than those in the past.

*"As I think about myself, I was fat too. But when I see other obese people, I also have such bias like they must be lazy and slow ... Well, in this sense, I am perceived as more progressive and not lazy anymore now"* (Kevin, in-depth interviewer 7)

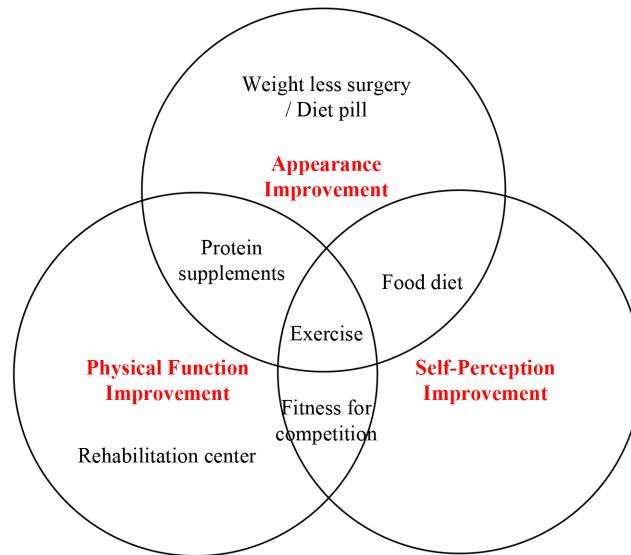
This result is consistent with the results of a previous study in which high-satisfaction groups who had been successful with weight management were more satisfied with their jobs than those who were in a low-satisfaction group (Thøgersen-Ntoumani & Fox, 2005).

## V. Discussion

The results of this study support the argument that stress related to weight is complex. The participants reported 10 types of stress, and they informed us that those who succeeded in weight management did not focus solely on improving their appearance. The results show that weight problems can be solved when several factors improve: physical strength (health problems, weaker athletic ability), self-esteem (negative self-perception), clothing-related behavior (passive about appearance), romantic relationships (weakened romantic attractiveness, others' disapproval of lower romantic attractiveness), and job ability (weakened

capability to complete tasks, and negative stereotypes about the capability to complete tasks) as well as appearance (dissatisfaction with appearance, others' disapproval of appearance). The authors suggest six coping strategies: improved appearance, improved physical function, and improved positive self-perception, more choices to improve appearance, enhanced romantic relationship, and enhanced job performance. In this study, no participants employed only one strategy for weight management. This finding agrees with studies by Leone et al. (2005) and Werntz et al. (2016), who emphasized the importance of body weight management for physical and psychological health by experimenting with several strategies since weight management only to improve appearance can be detrimental to one's health and psychological state.

The stress and coping strategies proposed in this study have practical implications for weight management counselors or marketers. Counselors can use a weight stress checklist to identify the stresses that the client is experiencing and recommend a coping strategy based on her or his specific areas of stress. For example, when both dissatisfactions with physical appearance and reduced physical function are the stressors, the most efficient methods are consuming protein supplements and doing exercise simultaneously. Combining the coping strategies of improved appearance and enhanced job performance will lead to greater success. If a client has problems with both physical function and depression, he needs a customized fitness program that can improve his sense of achievement along with a regular exercise routine by combining the coping strategies of improved physical function and improved self-perception. For a client who has the appearance, psychological state, and job ability problems, the counselor can recommend steady exercise that changes appearance by changing the weight and muscle density, improves physical function by enhancing physical strength, and improves self-perception by accomplishing the goal of enduring repeated and painful activities. If stress about appearance is so severe that a client wants sudden weight change, undergoing surgery or taking medication would be effective methods to resolve stress by using the coping strategy of improved appearance only. How-



**Fig. 2. Weight management suggestions for coping strategies.**

ever, the counselor should inform the client that these methods may involve negative side effects including increased serious health problems.

In <Fig. 2>, additional examples are given in the upper section to complete the intersection graph, and suggested weight management approaches based on the three types of coping strategies. The counselor can also use the picture like <Fig. 2> to communicate more effectively with the client. If someone is experiencing weight-related stress, it might be a good idea to draw the picture to help determine her or his weight management needs.

The theoretical implication of this study is that it discusses the problems that people experience, rather than from results obtained through experiments under limited conditions. The side effects of physical and psychological health are well known based on experimental studies, but the efficiency of work, clothing behavior, and romantic relationships are difficult to understand through these experimental studies. This study suggests that research on the effect of weight management should be extended to job efficiency, clothing behavior, and romantic relationship areas. In particular, researchers in the field of clothing can pursue studies that emphasize the positive aspects of clo-

thes based on the results of this study, which suggests that the expansion of clothing selection can lead to a positive psychological state. In addition, it can be used as a guideline for qualitative research based on the motivational theory of coping model for researchers who study the direction of problem solving for an issue. This study can also contribute to expanding the research using the Internet community by showing that the results of the online community shows a similar tendency to the results of actual interview data.

The limitation of this study is that other age groups, females, and culturally diverse groups were not considered in this investigation beyond Korean males in their 20s and 30s. However, focusing on this population is significant because they may experience a wider range of weight-related stressors than females, and Korean culture has stricter social standards for males than other cultures. However, since there will be differences in weight-related stressors for other age, gender, and culturally diverse groups, future studies should be conducted on more diverse research groups.

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