

Cooking and Maslow's Hierarchy of Needs: A qualitative analysis of amateur chefs' perspectives

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Abstract

The aim of the present study was to examine the effect of cooking as a hobby activity on the chefs, in the context of Maslow's Hierarchy of Needs. Twenty semi-structured interviews were conducted with amateur chefs in the qualitative part of the present study. The results of the analyses show that Maslow's theoretical construct is a relevant and valid context for understanding the effect of cooking on the chefs. Thus we found that cooking affords amateur chefs a sense of control, of social and ethnic belongingness, connecting to family's roots, it reinforces self efficacy and social esteem. We also found that cooking allows amateur chefs to express their creativity and feel good about themselves. Finally, the study shows that as perceived by amateur chefs, it has therapeutic elements, such as a dim sense of time, altered conscious level and strong sensual stimulus. The option of serving the cooked product was also perceived as a therapeutic variable in cooking.

Key Words: cooking therapy, Maslow's hierarchy of needs, amateur chefs, leisure time activity

1. Theoretical Background

Cooking is universal activity, with implications to nutrition, the environment and social relations (Wrangham et. al., 1999). In the past, it was assumed that the aim of this activity was to satisfy human physiological needs. Over the years, cooking has become a central element in Western culture, associated with quality of life and luxury (Beoku- Betts, 1995). And that in the past decades, the significance attributed to the activity of home cooking has increased. According to Almas (2006), this fact is reflected in the large amounts of money spent on kitchens and various fancy technological devices. She also claims that food and cooking are significantly present in various media and the world of leisure culture (cooking shows, designated food channels, news papers, magazines, advertisements and films) promoting "sophisticated" cooking. She claims that the purpose of cooking is not only to satisfy basic physiological needs but has a far more reaching goals.

Different studies have found relations between people's leisure time activities and their well being and quality of life (Caldwell & Smith, 1988; Hull, 1990; Leitner & Leitner, 1994). In order for the leisure time activity to contribute positively to one's quality of life, different researchers have claimed that the activity must suite the individual's capacities and needs. Zusman-Asher's study (1997) dealing with the congruence between leisure time activities and personality, affirm the above claim. She has shown a positive relation between contentment with the leisure activity and a general contentment with life.

1.1 Cooking and Maslow's Hierarchy of Needs

The present study has chosen "Maslow's Hierarchy of Needs" as an organizing theoretical framework for an understanding the effect that cooking may have on those who cook as a leisure activity. Maslow (1971) assumed the following five, hierarchically arranged levels of needs: physiological needs, secure needs, love and belongingness needs, esteem needs and self actualization needs. When a need arises, all of a person's behaviors are aimed at satisfying it. When the need is satisfied, it losses its dominance the following "higher" need in the hierarchy presses.

A satisfied need, however, has the potential to turn into a pressing need should the environmental equilibrium be disturbed. If a specific need is not satisfied to a minimum level, the need and the attempt to satisfy it, will dominate the persons' behavior and well being (Maslow, 1962). Cooking as a leisure time activity offers a unique potential to contribute to the amateur chefs' well being. Michalos' study (2005) examined the contribution of 66 leisure time activities to the individuals' well being. All examined activities were related to art, including playing an instrument, visiting museums and galleries, painting, photography, flower arrangement and cooking. The study has found that cooking best predicted subjective happiness and is one of the best five predictors of general satisfaction with quality of life.

Diverse attempts have documented in recent years attempts to utilize cooking as a therapeutic activity. Thus for example Sidenvall's (2000), study's results supports the idea that cooking satisfies secure needs. She interviewed elder Swedish women who had lost their ability to cook and found that particular disability hurt the women's sense of security, independence and personal freedom. Another study found that cooking satisfies love and belongingness needs (Hocking et. al., 2002). Women from Thailand and New-Zealand found cooking to be an enjoyable activity that allowed them to preserve tradition, develop a social network and feel loved and needed. In another study which interview religious Jewish women report that for those women cooking was a way of worshipping god (Starr- Sered, 1988). They also reported cooking allowed them to take care of their children's physical, spiritual and cultural needs

Melton's study (1998) examined cooking as a therapeutic activity for people with learning disabilities. The participants reported that the cooking improved their self confidence and their self esteem. Josephy- Berenbaum (1994) describes improvements in self and social esteem following cooking workshops among elders with Alzheimer's disease. In reference to the self actualization needs, Maslow (1962; 1971; 2000) stresses the importance of the "creative personality", and wrote that "making an excellent soup is no less a creative activity than creating a painting" (Maslow, 1962, p. 128).

We follow Maslow's general idea and set up to study more in depth the effect that cooking may have on amateur chefs in the context of Maslow's theory of needs and the possible therapeutic effect of cooking.

2. Method

2.1 Character of the study

The study applies qualitative phenomenological approach for two reasons: first, we found no research studies on the topic under investigation, therefore an initial broad study and in- depth examination approach was in order. Second, one of the most important goals of this work was to understand the experience and subjective meaning given to cooking by amateur chefs. For these reasons, the study used data collected by semi structured interviews. We did calculate the frequencies of the themes mentioned by the interviewed participants and use that to create the content factors for the analysis thus increasing the validity and generalizability of the study results.

2.2 Participants

Ten women and ten men, aged 25-69. They were **recruited** using the "**snowball**" method. The criteria for inclusion were: engaging in cooking by choice and cooking at least five hours a week. All participants belong to middle or middle-high socioeconomic classes. Seventy percent of them have an academic education, while the others have high-school education.

2.3 Materials and procedure

Data were collected by means of a semi-structured interview, including a short demographic questionnaire. The participants were interview at their homes by the first author and lasted between 60-120 minutes (75 on the average). The meetings opened by introducing their purpose ("to study and understand the meaning and the effect cooking may have on armatures chefs"). Then, the interviewees were asked an open-ended question ("what does cooking do for you, why do you cook?") followed by other topic-relevant questions. The interviewer adopted flexible and dynamic approach, in order to allow interviewees to feel free and open to touch upon the different meanings cooking may held for them. The interviews were all recorded, transcribed and then were analyzed in three steps. First, each interview was read in order to get a general impression of it as a whole and be re-familiarize with its' content as proposed by Moustakas (1994). In the second stage we followed Tesch's (1990) steps of analysis; we re-read each of the 20 interviews, extracted grouped interviewees' comments by themes. This procedure resulted in 18 themes.

Thirdly, based on the themes' content, we categorized each into one of Maslow's five categories of needs. Eleven of the themes were found fit to Maslow's hierarchy of needs. Seven of those were judged to be relevant to "cooking as therapy" category and two ("inspiring factors in cooking" and "frustrating factors in cooking") were judged to be irrelevant to present study's aims and therefore not included nor considered hence foreword (see Table 1).

3. Results and discussion

In the following we present first the participants' responses associated with Maslow's five categories of needs, then those associated with "cooking as therapy".

3.1 Physiological needs

Satisfying physiological needs helps a person maintain a stable and balanced internal environment, preventing a lack of vitamins, minerals or other essential components (Maslow, 1987). The sense of hunger signals a lack of components essential for normal life activities (ibid). Indeed, most interviewees (85%) identified satisfaction of physiological needs as a motivation for cooking. It is noteworthy that many interviewees identified the need to satisfy the hunger others rather than their own. These findings agree with those of Star-Sered (1988), concerning the meaning religious Jewish women attribute to kosher cooking. Satisfying hunger and providing healthy nourishment for the interviewees' family members, was found to be one of the central motivations for cooking. Hocking et al. (2002) too had found that New Zealand women feel that through cooking they take care of their family's nutrition and health, as they are expected. It should be noted that in the present study, some of the interviewees did not identify cooking as a means of satisfying hunger. Guy (28) refers to the loose link between the activity of cooking and satisfying hunger:

"Normally I don't eat what I make. The fun for me is doing the things... eating is not a factor... it is the doing itself that drives me."

3.2 Secure needs

A person's need for security includes his/her need for stability, order, an organized structure, limits and seeking that which is familiar and known (Maslow, 1987). Most interviewees (75%) referred to the sense of control they enjoy while cooking. Although we could not find a specific reference made by Maslow to the relation between a sense of control and satisfying the need for security, Maslow's detailed description of what constitute a secure environment clearly suggests such relationship. It seems that a people's attempt to gain control of their environment is, in Maslow's terms, their attempt to create a stable, familiar environment, and hence promote their sense of security. Control in cooking may come in several ways. One is the control of the space. From reading the interviews it is clear that for most of our participants while cooking, gaining the control of the kitchen and of all its content is an important ingredient in their joy of cooking. When asked, most responded that they find it difficult to share with others their cooking space and sometimes even the entire kitchen. It seems that it is very important for them to dictate and control the entire experience. Guy (28) says:

"It's like a taboo [that no one interferes with his cooking]. It's something that I begin, I want to accomplish it, I want to have like, I don't know, full control over it. I have the vision in mind when I cook of how to cook and I don't want to share it, it's no time to accept other ideas."

May (26) describes the process of cooking as a "war" in which she commands the entire experience:

"There is something [in the experience of cooking] of dominance, control, of being very assertive... It's like conducting an orchestra- "

3.3 Love and belongingness needs

According to Maslow (1987), love needs manifest themselves as a yearning for a friend, lover, wife or husband and the belongingness needs as a yearning for relationships, a sense of rootedness, friendships and social or familial acceptance (ibid). Generally, interviewees did not directly relate their desire to cooking as a way of satisfaction of love needs. Yet different statements they made attest to such a relationship, more prominently between cooking and maintaining close social familial relationships and their belonging to ethnic and long tradition. Almost two thirds (60%) of our interviewees said that cooking help them to maintain their social and familial networks Edna (58) said that that was her motivation even when her children were young.

It is the sitting together, the unseen bonding that is being reinforced while dinning as a family that drove her to prepare those lavish dishes for her family:

"What stood behind these preparations [cooking for her children] was the sitting together, the warmth, the feeling that I am devoted to them... Cooking and then sitting together, it really unites the family."

For Guy (28), as for many others too, cooking is a mean for satisfying love and belonging needs. In his words:

"Eventually [after my cooking] we all eat and enjoy it very much, and then it is our time to spend together. Food is a mean of creating these get-togethers."

These findings concur with those of Hocking et al. (2002), who also found that cooking helps maintain the cookers' social network and their place in this network, as social gatherings are organize around their cooking.

The need for belonging also includes one's wish for the sense of being part of a large familial and cultural tradition (Maslow, 1987). One of the prominent characteristics of tradition and ethnicity is the particular way of cooking, food and dining. For many (20%) of our participants cooking was an important way of reconnecting to their family and ethnic roots. For Daniel (58) cooking was a way of keeping her tradition alive, evoking fond memories of her now deceased mother and of those traditional recipes and tastes.

"[My] mom loved to cook. I still remember the tastes recreate them. But I know that the day I 'go' it will stop existing."

A sense of responsibility is evident in these words of passing the torch. Star- Sered's (1998) has found that religious Jewish women unconsciously use cooking to strengthen their relation to Jewish tradition and Beoku-Betts (1995) report that Gullah tribe women's main motivation for cooking the way they do was to preserve their cultural identity. Our participants also emphasized their feeling of responsibility to pass their family's and ethnic tradition. They attested to the importance of that sense of belonging and wanted to pass that on. Hocking et al. (2002) too has found that participants perceive cooking as an important channel for transmitting and preserving the cultural tradition.

3.4 Esteem needs

The esteem needs are comprised of two needs: a self esteem need, includes the need for power, ambitiousness, proficiency and confidence in the existence of the world, and a need for esteem by the environment, including praise, prestige, recognition, respect and attention (Maslow, 1987). Studies have indicated that the individual's self perception relies mostly on feedback received by others (ibid).

Others' appreciation of their cooking is something that all our participants mentioned as a very important motivating factor making it the most prevalent one. Without the feedback, Sharon (25) says, she would not enjoy cooking :

"Let's say I can prepare it [food] for myself and sit down and eat but I will be bummed if no one comes tasting it, if there is no one to share it with, to say 'wow, that was delicious'"

May (26) was more explicit

"The feedbacks (from others)... I yearn for it... fulfills my need for appreciation .You see, I grew up in a typical Sephardic home, where the woman's place is in the kitchen and she isn't supposed to be appreciated for it because it's her job... but for me it is very different.... yes, the feedback is pretty important to me."

Analyzing the content of the participants' comments it comes clear that in addition to enjoying others' appreciation of their cooking skills, it put them in the focus of attention and point of focal. This seems to be no less important, although not directly said, it was implied by most. Josephy-Berenbaum (1994) reports similar findings. She studied the function of cooking as a therapeutic tool for elders in a alders' home and found that the staff's feedback to the patients' cooking contributed to their sense of self worth.

In addition to gaining others' recognition and being the focus of attention, most interviewees (80%) referred to the fact that being in that place enhance their sense of self-esteem. The interviewees mentioned in this regard that feeling good about their capability/talent in cooking is an essential motivating force and basic element in their enjoyment of cooking. May (30) describes how cooking strengthens her in times of stress:

"If something troubles me, cooking makes me feel appreciated...or even thanked... it increases my confidence too... I tell myself that there is so much in me to give as a human being, I am talented and others see it too... things will work out and be ok. [Cooking] takes me to a more optimistic place."

Melton (1998), who also investigated cooking as a therapeutic activity, found that cooking increased his participants' self confidence sense of autonomy, dexterity, control and self image.

3.5 Self actualization need

Maslow (1987) has noted that more than any of the others needs, self actualization is pursued by each in his/her own way According to him, the most significant individual differences are to be found at this stage of the Hierarchy of Needs. According to Maslow (1971, 1987), creativity is a necessary, though not sufficient condition for the pursuing self actualization. Many of our interviewees (85%) referred to creativity in connection to their drive for cooking. Oren (38) for example said:

"If I feel that I have to create something the first thing I do is go to the kitchen... there I will find something to create."

Lea (53) refers to the different cooking techniques she uses and to improvising recipes as the creative aspects in her cooking. She said:

"I find creativity also in the course of cooking. It can be the tying new things that aren't in the recipe, or the way of cooking – grilling or baking... being creative can be in any aspect of the process."

Interviewees also referred to the way the food is presented as an important element in cooking creatively. It included choosing the colors of the food, spices and even the choice of serving dishes. Lea (53) described the presentation part:

"The most creative part in my cooking is the presentation of the food... I actually draw with the food... choosing the dishes I will serve my food is also very important... matching the food and the dish... I need to present my food on appropriate plates."

For Maslow, Self actualization has much to do with daring, willing to experiences new things and adopts a non-conventional thought pattern (Maslow, 1971). For many of our interviewees (70%), cooking is an opportunity to do just that: improvise, try new recipes and make up new experience for themselves and others. They discover their "creative personality", as Maslow called it, when they take the risk and dare trying. For those whose cooking and food is an important aspect of their lives, these leaps to the unknown is no laughing matter.

Yaniv (36) too describes the process of his cooking as a flexible one, unbound to a certain recipe. He claims that the sense of creativity is achieved when he manages to improvise a finished product using the raw materials in his house without planning a head. He says:

"You see, cooking for me sometimes begins and isn't quite definite. It's not as if I come home and say 'ok, now I will prepare a recipe from Aharoni's book'; not at all. I open the fridge and sometimes I may take out two zucchinis and two carrots and say 'what shall I do with the zucchinis, I will see if I have cheese, maybe I will stuff them with cheese? No, no cheese', so I put the zucchinis back in and take out two fennels [smiles]. You see, that's how it goes, I don't know where it would lead to, which is very fun. Thinking what goes with what and this creation takes my thoughts elsewhere and not reading a recipe book. 'eh... ok, I don't have this or that, ok so I won't prepare it now, I will do it next week.' Of course, we all cook other's recipes too. We all cook from books as well and want to know what this or that person did. But the 'independent cooking' itself, when you don't know exactly what you want to prepare, that it something that begins and you do it as you go, you experiment with things."

Yaniv refers to this process of cooking as "independent cooking." It seems that this process affords him a sense of control, enjoyment and satisfaction. In the research literature, the activity of cooking is perceived as an activity that promotes the expression of the individual's creativity vis-à-vis the great versatility of the raw materials and the different textures and colors (Josephy – Berenbaum, 1994; Melton, 1998; Hocking et. al., 2002). And yet no actual mapping of the ways in which the cooker may realize her\his creativity was performed.

Contents reflecting personality patterns recur in the interviews, agreeing with the "creative personality" described by Maslow (1971) as that with the greatest potential for self actualization. The "creative personality" has to do with a spontaneous pattern of behavior, high expressivity, high eloquence and fearlessness when it comes to new experiences. These people do not fear the unknown, unfamiliar and mysterious and do not try to make ambiguous situations more clear. They feel at ease in face of uncertainty and their creativity is thus expressed. For example, the interviewees demonstrate willingness to combine different raw materials without knowing in advance the taste of the final product. In addition, they demonstrate a flexible attitude toward existing recipes and combining a number of recipes. All of these reflect "easy going", uninhibited daring thought patterns and spontaneous. Aesthetic, unlike in Sidenvall et al.'s study (2000) was not mentioned as such in by our participants. They may alluded to it when they referred to the importance of the way the food is presented or to how it looks. They did mention these aspects but in the context of creativity

3.6 Cooking as therapy

As a rule, the aim of therapeutic activities is to do well by those engaged in it. The statements of many of our participants, associating cooking with some inner personal benefits are the rational for adding "cooking as a therapeutic activity" category. Some of the statements alluded to the therapeutic effect of cooking while others were explicit. Thus for instance Yaniv (38) said:

"For me, it's [cooking] a real therapy".

May (30) also describes her experience as:

"You split yourself. The entire physical part of you becomes insignificant; you are concentrated only on your inside, your thoughts, and feelings, all that has to do with your psyche."

For Guy (28) cooking is some kind of meditation:

"Perhaps it's a bit of an exaggeration, but it's like meditation because you move onto a different level... you don't feel different sensations you did before."

But for almost all our participants cooking is a "leisure experience". A variable coined to describe an experience in which there is compatibility between the one's needs, skills and abilities and the leisure activity (Tinsley & Tinsley, 1986; Zusman- Asher, 1997). By other researchers (Hull, 1990; Colmen,1993; Iso – Ahola, 1984; Leitner & Leitner, 1994) "leisure experience" is the opportunity offered by the leisure activity for new experiences, stress reduction, self expression, enjoyment, development of creativity, increasing self esteem, the sense of relaxation and the expression of wishes. Results of studies (Coleman & Farris- Dufrene, 1996; Michalos, 2005; Sholt & Gavron, 2006) show that art-related leisure activities (dance, music, painting and sculpturing) promotes leisure experience and in that contributing to the individual's quality of life, hence are therapeutic. Tal (37) describes how cooking allows him to immerse concentrating on the act of cutting and the monotonous motion allow him a connection with the in his "self":

"In the kitchen time is for myself. I can think a lot. While chopping onion or whatever I think of other things, personal, I become immersed in thoughts."

Tal described the "Mandala" effect. The psychological journey one takes while engaged in a repetitive, monotonous activity (Miller- White, 2005). Jung identified mandala in his patients' drawings and claimed that its mere creation promotes a connection between the conscious and the unconscious (Slegelis, 1987). To prove the point from the other angle, Sheron (25) said that the act of cutting is so threatening and overwhelming for her, that she tries to avoid it as much as possible. If cutting may be a joy for some and threatening for other, the first-hand experience, literally, of the food is pleasurable for most. The sensual sensation of dealing with the food bare-handed is best described by Lea (53):

It's very pleasant for me to touch the vegetables and I really enjoy mixing and tossing salads with my hands. I can take the time with the dough because I love... I like all the mushy things I can do with my hands. If I make a chocolate decoration I really enjoy touching the chocolate itself... I get pleasure out of these things."

Another source of great satisfaction is the giving, nurturing others. Cooking, it seems from analyzing the interviews, is for many an opportunity to express their need, at least sometimes, to be at the giving end their relationships. Sharon (25) said:

"[cooking] is an opportunity to give. For people who use to give and get pleasure out of it, cooking is great... being the nourishing 'mother' and seeing the other accepts it and it makes him happy and content... it's the most satisfying thing in the world."

For Tali (69) too, there is no point in cooking if there is no-one to serve it to:

"I, for example, will never cook for myself... A big part of the fun [in cooking] is seeing people enjoying it."

Sidenvall et al. (2000) report similar findings. Swedish women were found to perceive cooking as a preparation of a gift to others. It is likely that food and home-cooking becoming central values in Western culture (Almas, 2006) is a significant element in this.

3. Conclusions and implementation

The main aim of the present work was to examine the potential psychological benefits of cooking. If found, then to raise public, academic and even therapists' awareness to the unique contribution of the cooking to the individual's well being. The study's results were based on the content analysis of semi structured interviews of amateur chefs. Its first contribution, we feel, is by its mere execution. As far as we know, no qualitative research examined the same research question, even though more and more people, of both sexes, choose cooking as a leisure activity.

The analysis of the experiences of our interviewees has shown that cooking as a hobby does have the potential to satisfy needs ranging across the Maslow's Hierarchy of need (Maslow,1971). This finding suggests that cooking as a hobby improves, at least to a certain extent, the person's well being. Awareness of this potential may promote further analysis of the specific components of the cooking process and their association to specific psychological benefits. A deeper understanding of the potential therapeutic effects of cooking may lead to a structural intervention process which in turn may lead to "cooking therapy" as an additional form of therapy to the more general form of therapy known as Art therapy or Occupational therapy.

Examining the potential psychological benefits of cooking in the context of Maslow's theory is only one way of studying the validity of cooking as a therapeutic activity. Future research should try to examine similar effect with different dependent variables. The psychological benefits of cooking may be of great range of variables and the present study is only its first step. Furthermore, while the present study was of qualitative/explorative nature, future research may be of quantitative nature, legitimizing generalization of its results. The field is wide open for various research questions and investigating procedure, based on our results, the potential benefits are great.

4. Research limitations and future directions

Both the limitations and the advantages of the study stem from the use of the qualitative research approach, the use of semi structured interviews as research tools and the processing of data involving the researcher's subjective opinion, which may all weaken the reliability and validity of the study. However, these limitations may serve as a platform for many future studies, adopting different research methods.

Firstly, further research is in order, studying the experiences of cooking as a hobby from a theoretical prism other than Maslow's Hierarchy of Needs. For example, approaches dealing with quality of life and the influencing variables, satisfaction with life or well being approaches. These studies may employ a quantitative paradigm, using the findings of the present study as a basis for a questionnaire. Second, a quantitative research may be conducted, aiming at a comparison between the manners in which the cooking activity affects men and women, referring to two dimensions: cooking as a necessity and cooking as a hobby. In addition, the potential contribution of cooking as a therapeutic tool must be seriously considered, conducting a quantitative research from a theoretical prism of different theories of personality. Such a study will examine the therapeutic effects of cooking on populations of patients, observing changes in behavior in a number of aspects relevant to the specific research population. Lastly, on a similar vein, a research may be conducted, comparing the therapeutic effects of cooking with those of other therapeutic methods from the field of art therapy.

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Table 1: "eighteen initial themes, their recurrence and grouping into conceptual themes"

Initial theme (N=18)	Conceptual theme (N=6)	Recurrence of themes among interviewees (N=20)	Recurrence of statements including the conceptual theme among all statements analyzed (N=455)
Cooking for satiation	Physiological needs	85% (of which 47.0% women)	2.41%
Sense of control	Secure needs	75% (of which 60.0% women)	6.36%
Cooking and health		45% (of which 77.7% women)	
Cooking and transition	Love and belongingness needs	20% (of which 50.0% women)	10.97%
Cooking as a nostalgic tool		70% (of which 64.2% women)	
Cooking as a social connector		60% (of which 75.0% women)	
Self efficacy	Esteem needs	80% (of which 60.0% women)	18.22%
Improving skill		45% (of which 44.4% women)	
Treatment by the environment		100% (of which 50.0% women)	
Creativity	Self actualization needs	85% (of which 52.9% women)	13.4%
Use of recipes		70% (of which 64.2% women)	
Sense of time	Cooking as therapy	60% (of which 66.6% women)	40.38%
Cooking as a tool for self expression		70% (of which 71.4% women)	
Elements in cooking		100% (of which 50.0% women)	
Content of thoughts in the course of cooking		55% (of which 63.6% women)	
Relations with the environment: cooking as a channel for giving		85% (of which 70.5% women)	
Frustrating factors	Not grouped in any conceptual theme	50% (of which 60.0% women)	3.51%
Inspiring factors	Not grouped in any conceptual theme	55% (of which 72.7% women)	4.61%