

The role of identity and gender in seafood cooking skills

Role of identity
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cooking

Anders Wien

*School of Business and Economics, UiT The Arctic University of Norway,
Tromsø, Norway, and*

Siril Alm and Themistoklis Altintzoglou
Nofima, Tromsø, Norway

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Abstract

Purpose – The purpose of this study was to explore whether consumers' confidence in cooking skills related to seafood differed across genders, and if such difference could be explained by the identity-relevance of seafood cooking for men.

Design/methodology/approach – Survey data was collected from a balanced sample of 515 Norwegian consumers.

Findings – The results showed that men (versus women) with high confidence in their seafood cooking skills have a lower preference for convenient seafood solutions, indicating that these men may be more reluctant to use food products that could hinder the cooking outcome being attributed to their cooking skills.

Originality/value – This study adds nuance to the understanding of male consumers as highly reliant on convenience products when cooking. More specifically, this study provides novel insight into how men function differently than women in relation to preparing seafood, suggesting that some men resist using convenient seafood solutions in order to express an identity as skillful in the kitchen.

Keywords Gender, Convenience foods, Identity, Cooking skills, Seafood

Paper type Research paper

1. Introduction

Domestic cooking has traditionally been a women's main responsibility (Neuman *et al.*, 2017a). It is therefore no surprise that the literature indicates that men have lower confidence in their cooking skills compared to women (Caraher *et al.*, 1999; McGowan *et al.*, 2017) and thus are more reliant on convenient food solutions when having to cook (van der Horst *et al.*, 2011).

The literature highlights several problems with this phenomenon, since men who live alone have been found to practice unhealthy eating behavior and consume unhealthy foods (Hughes *et al.*, 2004). Men's lack of cooking skills may be especially critical when it comes to preparing seafood, as regular meals of seafood are recommended by health authorities as a part of people's diets (Scientific Advisory Committee on Nutrition, 2004). Indeed, the literature indicates a direct relationship between poor seafood cooking skills and lower seafood consumption (Brunso *et al.*, 2009; Trondsen *et al.*, 2003). Young men in particular have been found to have low fish consumption and weak belief in the health benefits of eating fish when compared to women (Verbeke *et al.*, 2007).

However, societal changes and increasing gender equality have also increased men's interest in making food, and men taking responsibility for everyday cooking in the household seems to be on the rise, particularly in the western world (Neuman *et al.*, 2017b). Indeed, several researchers report that domestic cooking is increasingly seen as a masculine activity (e.g. Kelly, 2015; Leer, 2016). Thus, we, the authors, suspect that men's perceived cooking skills today may not be inferior to those of women. This study seeks to examine this issue and is particularly interested in men's confidence in their cooking skills related to seafood.

We build our investigation on the assumption that gender differences in perceived seafood cooking skills might be related to the relevance of seafood cooking for a person's identity.



While female cooking is strongly associated with a caring motive, several studies suggest that men use cooking to gain prestige and express their identity (e.g. Fürst, 1997; Kelly, 2015). Knowledge and expertise seem to constitute the defining features of men's cooking-related identity (Cairns *et al.*, 2010). Seafood is also an identity-relevant domain for many men as it relates to the masculine activity of recreational fishing (Young *et al.*, 2016). Hence, just like meat cooking (Sobal, 2005), seafood cooking might be a highly relevant domain for men to express their masculine identity as competent cooks. This would be a strong motivator for men to increase and express their skills related to preparing seafood.

To examine this theory, this study examines how men and women with high and low confidence in seafood cooking skills may differ with respect to preferences for convenient seafood solutions. While men have shown high reliance on convenience products in previous research (Ahlgren *et al.*, 2006; van der Horst, 2011), quick and simple food is not necessarily valuable in the case of identity-relevant cooking. Such features may hinder the cook in expressing his cooking skills and competence, and as such may harm men's cooking identity and confidence in their cooking skills. On the other hand, women should presumably be more concerned about regularly providing food for their family and would therefore consider a quickly prepared seafood meal a good solution as it should still provide several health benefits. Thus, we assume that men with high confidence in their seafood cooking skills should be more negative towards convenient seafood solutions when compared to women with high cooking skills. We describe these predictions in the following section, starting with a discussion on gender and cooking skills, followed by a discussion on seafood cooking as an identity relevant activity, and the potential role of convenience solutions in this context. A study based on a balanced sample of 515 Norwegian consumers is used to test our predictions.

2. Theory

2.1 Gender and cooking skills

Cooking skills are an important aspect of food literacy (Vidgen and Gallegos, 2014). Such skills allow people to prepare commonly available foods and efficiently use common pieces of kitchen equipment. A sufficient repertoire of skills also allows people to experiment with food and adapt recipes. Since men have conceded much of the control associated with meal-related tasks to their female counterparts (Newcombe *et al.*, 2012), they have reported lower confidence compared to women when it comes to such skills (Caraher *et al.*, 1999; Hartmann *et al.*, 2013; McGowan *et al.*, 2017). However, there are studies which indicate that this is changing, and that men today might be at the same level as women when it comes to cooking skills (Winkler and Turrell, 2009).

First, with a growing number of professional women who are equal or sole income-earners, the duties in the home have been reallocated (Kelly, 2015). Many Scandinavian men report today that they take an equal responsibility for everyday meal preparation at home (Neuman *et al.*, 2017b). Although an equal sharing of cooking responsibility between genders might not yet be the case in most countries (Daniels *et al.*, 2012; Hartmann *et al.*, 2013), the trend that men increasingly participate in domestic cooking is widespread (Keller *et al.*, 2004; Sellaeg and Chapman, 2008; Szabo, 2014). This trend should positively influence men's cooking skills in both the short and long run. In the short run, men entering a family life in which they share domestic responsibilities with their partner would strengthen their cooking skills in order to provide varied and healthy food for their family (Neuman *et al.*, 2017b). Such cooking skills might be acquired for instance through reading cookery books (McCloat *et al.*, 2017), engaging in online recipe communities (Rokicki *et al.*, 2016), watching cooking shows on TV (Leer, 2016), or taking a cooking class (Caraher *et al.*, 2009). These sources of cooking knowledge should facilitate a relatively quick learning process that makes in particular younger men progress from the basic repertoire that they acquired when moving away from home to an increasingly skilled repertoire (Neuman *et al.*, 2017b). In the long run, the trend of

increasing gender-equality in the kitchen should have a more fundamental effect on men's cooking skills. Bringing up boys to understand domestic chores as gender neutral may promote the domestic involvement of these boys later in life (Penha-Lopes, 2006). Indeed, De Backer (2013) shows that young men cook more often if they recall their father cooking during childhood. This implies that men entering the kitchen today should have a fundamental effect on men's cooking skills by working as role models for their sons.

Second, the image of domestic cooking has been changed from a somewhat feminine to a more masculine activity. This masculinity of cooking could largely attribute to how the general media tend to portray male cooks. To differentiate them from the feminine cook and protect their masculinity, media typically portray them as "scientists, chefs, athletes or entertainers" who engage in cooking as a professional, public challenge rather than a domestic chore (Swenson, 2009). Masculine cooking is also portrayed as "leisurely entertainment", implying it is temporary and voluntary, and not tied to the responsibilities of family life. In addition, several male celebrity chefs such as Gordon Ramsey and Jamie Oliver have, through their TV shows, given male home cooks aspirational role models, promoting a "masculine" way of cooking based on a high level of cooking skills and complicated dishes (Leer, 2016).

Hence, men not only do more of the cooking at home as a family duty, but also cook to fulfil the new masculine ideal of being skillful in the home kitchen (Kelly, 2015). Herein lies what we suspect is the main driver of an increase in men's confidence in cooking skills. Many men seem to aspire towards an identity as a competent cook who makes extraordinary food and has adopted cooking as leisure-like activity to manifest this identity (Kelly, 2015; Szabo, 2014). Indeed, Hartmann *et al.* (2013) show that men's cooking skills are more related to the enjoyment of cooking than those of women. Thus, we suggest that the difference in perceived seafood cooking skills between men and women could be understood by taking an identity-based perspective on cooking.

2.2 Seafood cooking as an identity-relevant activity

Consumer behavior is often driven by identity motives, for instance by buying certain products or using products in a way that enable consumers to express who they are and the group to which they belong (Reed, 2012). An identity is "any category label to which a consumer self-associates either by choice or endowment" (Reed *et al.*, 2012, p. 312). A category label becomes an identity once the consumer has begun to incorporate it into his or her sense of who he or she is and has initiated the process to become that kind of person. To facilitate this process, consumers seek opportunities to engage in behaviors associated with their target identity, because these behaviors act as signals of "who they are" to oneself and to others (Berger and Heath, 2007; Leung *et al.*, 2018).

In the food context, a typical form of identity-based behavior is related to what type of food people eat. Through the food they eat, people confirm who they are and who they are not (Fürst, 1997). For instance, some people who follow a vegetarian diet develop a vegetarian identity through diverging from the social norm of eating meat (Rosenfeld and Burrow, 2017). People may also eat certain types and quantities of food to confirm their masculinity or femininity, that is their gender identity (Vartanian, 2015). For instance, men are more likely to eat red meat and large quantities of food as these choices confirm their masculinity, while women are more likely to eat fruits and vegetables and smaller meals to confirm their femininity (Campos *et al.*, 2018; Cavazza *et al.*, 2015). Thus, the food domain seems to play an important role in consumers' identity-making, and seems to lead to different types of identity-related behaviors depending on gender.

In this study, we are interested in another form of food-related identity that might differ depending on gender: the identity some people develop based on their cooking skills. While cooking was previously viewed as routine housework, it is today seen as fashionable and an important part of people's identity formation (Bugge, 2003). Cairns *et al.* (2010) suggest that

acquiring skills and showing competence are important factors when constructing an identity around cooking and something men are especially attracted to. This aligns with a stream of literature discussing cooking from a gender perspective (e.g. Cairns *et al.*, 2010; Kelly, 2015; Leer, 2016; Neuman *et al.*, 2017b; Szabo, 2014). This literature suggests that men mainly view cooking as a practical skill, as culinary artistry, as entertainment and as a strategy for seduction (Szabo, 2014). Cooking is a way for men to show competence and is rewarded with confidence, the respect of peers, and the admiration of women (Kelly, 2015). It is comparable to home repair, physical labor, athletic competition or sexual exploits as a way for men to portray masculinity. Research also highlights that men view cooking as more of a hobby than a duty, and that they cook when they feel like it, such as on special occasions, on weekends or over a barbecue (Roos *et al.*, 2001). Research on online recipe communities suggests that these tendencies are visible in how men communicate about cooking (Rokicki *et al.*, 2016). For instance, men (versus women) are more likely to publish difficult recipes with more diverse ingredients and longer cooking time as these are signals of competence and should impress others.

This self-oriented view of masculine cooking stands in contrast to the other-oriented view of feminine cooking: Women cook to please others and to care for their loved ones (Cairns *et al.*, 2010). Recent research challenges this dichotomy of “masculine” self-oriented cooking and “feminine” care-oriented cooking and shows that men may also adopt the role as the family’s “caregiver” who prepares everyday meals for his loved ones (Neuman *et al.*, 2017b). However, other studies argue that the stereotype of masculine cooking as related to extraordinary food and high-level culinary skill is still very much alive, and that many men adapt to their new domestic duties in the kitchen by framing their cooking as culinary art or performance (Cairns *et al.*, 2010; Kelly, 2015; Leer, 2016). Thus, men still seem to embrace a “traditional culinary masculinity” that is self-oriented and related to the display of knowledge and expertise (Cairns *et al.*, 2010; Szabo, 2014).

Men’s tendency to build and express an identity as a skillful in the kitchen resonates with the general approach men use when they want to self-enhance: They overestimate and boast about their abilities so that they appear superior to others (Cross and Madson, 1997). Conversely, women are more other-oriented, and enhance the self by striving to protect or enhance relationship partners. These gender differences are explained by men’s independent self-construal, that is an emphasis of being unique and expressing the self, and by women’s interdependent self-construal, that is an emphasis on belonging and fitting in (Singelis, 1994). Hence, men’s (versus women’s) motivation to build an identity as a competent cook seems to be rooted in fundamental gender differences related to how each gender bolster “the self”.

In this research we are interested in men’s cooking identities related to seafood. Seafood is interesting from a gender perspective as it is associated with conflicting associations of masculinity and femininity. As a meal, seafood is considered a more feminine food (Rozin *et al.*, 2012). The traditional explanation, according to Bourdieu (1986), is that seafood is not only looked upon as light food – it also must be eaten in a way which contradicts the masculine way of eating. These supposedly feminine seafood associations could weaken men’s interest in cooking seafood as it might attenuate their masculine cooking identity. On the other hand, seafood, especially fish, is something many men have a masculine relationship with through fishing. Either as a profession or in the form of recreational fishing, the act of catching seafood is highly associated with masculinity (Bull, 2009; Young *et al.*, 2016). This masculine association is partly rooted in the primal hunter-gatherer instinct for men, which relates to men’s innate urge to hunt and assume the role as a provider for their families and communities (Young *et al.*, 2016). Fishing also seems to trigger men’s masculine instincts related to competitiveness (Young *et al.*, 2016). These masculine associations with the catching and handling seafood could strengthen men’s interest in cooking seafood as it might enhance their masculine cooking identity.

We believe that seafood cooking would be more associated with the latter, as cooking may be seen as an extended part of the catching process. By cooking seafood, a male gets a chance to prepare his “prey” for his family. In addition, seafood is often perceived as inconvenient food and “difficult to prepare” (Carlucci *et al.*, 2015), which gives men a chance to show off their advanced cooking skills. Seafood is also associated with some risks related to health and food safety, which might require certain methods in post-harvest handling and preparing in order to minimize the risks (Mansfield, 2011). Therefore, men might view seafood cooking as an opportunity to display hegemonic masculinity by taking care of a potential risk for their family (Szabo, 2014). Taken together, we assume that men view seafood cooking as more masculine than other forms of cooking. This should increase the identity-relevance of cooking seafood for men, which should provide a strong motivation to strengthen the cooking skills for this particular type of food. We believe this should lead to higher confidence in seafood cooking skills among men when compared to women.

H1. Men should report higher confidence in seafood cooking skills than women.

If our argument is correct, that men’s key motivation (and not women’s) to acquire seafood cooking skills is to construct an identity as a competent cook, then men should diverge in their seafood cooking behavior when compared to women. Divergent behavior is a way to help consumers manifest their identity (Berger and Heath, 2007). This research suggests that men might diverge when it comes to preferences in using convenient seafood solutions in their cooking.

2.3 Resistance towards convenience products

Those who strongly identify with a category seek opportunities to engage in behaviors associated with their target identity, as it helps them manifest an identity for themselves (Leung *et al.*, 2018). However, while some identities are quite easy to manifest, such as eating vegetarian food to signal your vegetarian identity (Rosenfeld and Burrow, 2017), other behaviors, like cooking, are dependent on their outcomes. For instance, if a man wants to build his identity as a skillful cook, it is first important that he manages to make successful meals. In addition, he also needs to feel that the outcome is attributed to his skills and not some external factor. If he cannot credit his own skills as a cause of the successful meals, his identity as a competent cook might be weakened.

How could men solve this issue and make sure the cooking outcome is attributed to their own skills? A typical approach people use when building an identity is to show resistance towards anything that might compromise that identity. This is a strategy used for instance by “hipsters”, who are a group of individuals who work to develop and maintain a counter-cultural identity based on an idiosyncratic and alternative style (Cronin *et al.*, 2014). To preserve this identity, hipsters distance themselves from mainstream food by eating “decommodified” and vegetarian food, which are regarded as marginal, or deviant, food options. Other research shows that younger consumers choose certain foods to refuse bowing under parental authority (James, 1982) or adopt a certain eating style as a resistance strategy to adult rules (Chitakunye and Maclaran, 2008). Families might also use food-related resistance strategies to build their family identity (Moiso *et al.*, 2004); instead of buying commodified food offered in the marketplace, families prepare homemade food to express their family identity.

We believe that men who try to build an identity as skillful seafood cooks would also use a resistance strategy to manifest their identity. People who build identities around consumption activities would typically use the activity’s “difficulty,” or degree to which it requires using acquired skills, as an identity-signal to themselves and other people (Stets and Burke, 2000). By being difficult, performing the activity is less achievable by people who lack the necessary skills, and therefore becomes particularly diagnostic of the identity of those who have the skills to perform it. Accordingly, Leung *et al.* (2018) show that consumers may

resist using automated solutions in relation to consumption activities that are highly identity relevant. The reason is that the automated solutions hinder the attribution of identity-relevant consumption outcomes to the self. For the same reason, we expect that men with high confidence in their cooking skills would show a lower preference for using convenient seafood solutions when cooking. Convenience products are partly offered to compensate for a lack of cooking skills. For instance, a ready-made sauce is helpful for consumers who struggle with making sauces from scratch. However, they also replace the skills essential to the identity of the competent cook and remove opportunities for internal attribution.

Thus, we predict that men (and not women) with high perceived seafood cooking skills might be more reluctant to use seafood convenience products, as doing so hinders them in attributing successful cooking outcomes to their cooking skills. Indeed, [Rokicki et al. \(2016\)](#) show that men with high interest in cooking prepare more complex and time-consuming meals than women. Women, who presumably lack identity-based motivations related to cooking competence, should be more willing to use seafood products that make cooking quicker and simpler, as they are more concerned about feeding their loved ones.

H2. Men (compared to women) with high confidence in their seafood cooking skills should have a lower preference for convenient seafood cooking solutions.

Based on the hypotheses above, a conceptual model is presented in the following [Figure 1](#):

3. Method

3.1 Sampling procedure

This study was based on a balanced sample of Norwegian consumers ($n = 515$) recruited by a marketing survey service provider agency. Since we wanted participants who had some experience with cooking seafood, we recruited respondents by asking how often they bought salmon and trout fillet products in a short online questionnaire. Those who responded with at least one to two times a month received information about the study and an invitation to participate.

The study was conducted in accordance with the ethical guidelines of UiT The Arctic University of Norway, and did not require ethical approval as no privacy information was obtained in the study and the data was of no ethical sensitivity. Anonymity was secured using anonymous questionnaires and by following the GDPR-compliant privacy policy of the subcontracting professional agency that performed the data collection.

All participants were older than 18 and were responsible for at least 50% of the food purchases in their household. 57% of the respondents were women and the average age was 45 years. The descriptive statistics for demographics are shown in [Table 1](#).

3.2 Questionnaire and measurement

Measures for *confidence in seafood cooking skills* were inspired by the study of [Piemiak et al. \(2007\)](#). The measures asked each respondent to indicate how confident they were in relation to various tasks associated with preparing seafood. The items, measured on a 7-point scale from not confident at all (1) to extremely confident (7), were: "Make good dinners with seafood",

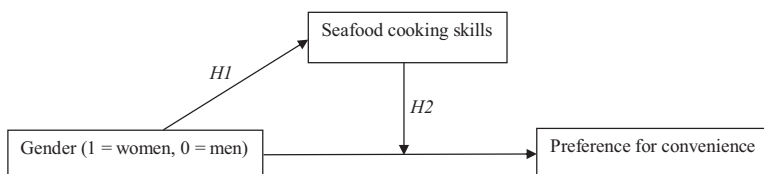


Figure 1.
Conceptual model

			Percent	Role of identity and gender in seafood cooking
Gender	Male		57.4	
	Female		42.6	
Age group (year old)	18–35		29.6	
	36–50		33.3	
	51–81		37.2	
Education	Less than a high school diploma		2.4	
	High school degree or equivalent		30.6	
	University level (1–3 years)		34.5	
	University level 4 + years)		32.5	
Household income	Below €30.000		10.0	
	€30.000–69.999		42.6	
	€70.000+		47.4	
Family status	Family households		64.6	
	Single households		35.4	
Children in the household	Have children under 18		35.8	
	Have no children under 18		64.2	

Table 1.
Descriptive statistics
for demographical
characteristics

“Freeze fresh fish to preserve its quality”, “Defrost frozen fish preserve its quality”, “Clean and prepare whole fish ready for use” and “Assess whether a fish product has good or poor quality”.

To obtain an indication of whether confidence in seafood cooking skills is particularly related to masculine cooking, we also measured respondents’ *confidence in their general cooking skills*. This was measured on the same scale as above, with four items adapted from [Barton et al. \(2011\)](#): “Make food from basic ingredients”, “Follow a simple recipe”, “Taste food you’ve never tried before”, and “Prepare new food and try out new recipes”.

The questionnaire defined and measured *preference for convenient seafood solutions* as evaluations of how important convenience was when buying seafood. Measures were adopted from [Olsen et al. \(2017\)](#), where each respondent had to rate their perceived importance of four convenience attributes related to a recent purchase of seafood for dinner. The items, measured on a 7-point scale from not important (1) to extremely important (7), were: “Easy to prepare”, “Fast to prepare”, “No planning”, and “No spill/odor when preparing”.

Demographic information, such as gender, age, urbanization, education level, occupational status, civil status, number of children under 18 years and household income was asked for as well. These were used as control variables in the analysis as [McGowan et al. \(2016\)](#) indicated that socio-demographic variables could influence people’s cooking skills.

3.3 Data analysis

The data was analyzed with the help of SPSS version 25. T- tests and ANCOVA were performed to test the significance of differences between genders in cooking skills. A regression analysis using a moderation procedure ([Hayes, 2013](#)) was used to test the interactions between genders and cooking skills and their main effect on preference for convenient food and seafood.

4. Results

We first assessed the dimensionality and reliability of the two cooking skills scales and the preference for convenience scale. Factor analyses showed that the items measuring confidence in seafood cooking skills (factor loadings ≥ 0.71), confidence in general cooking skills (factor loadings ≥ 0.67), and preference for convenience (factor loadings ≥ 0.65) were unidimensional. Reliability analyses using Cronbach’s α showed that the items also were internally consistent (seafood cooking skills: $\alpha = 0.81$; general cooking skills: $\alpha = 0.80$;

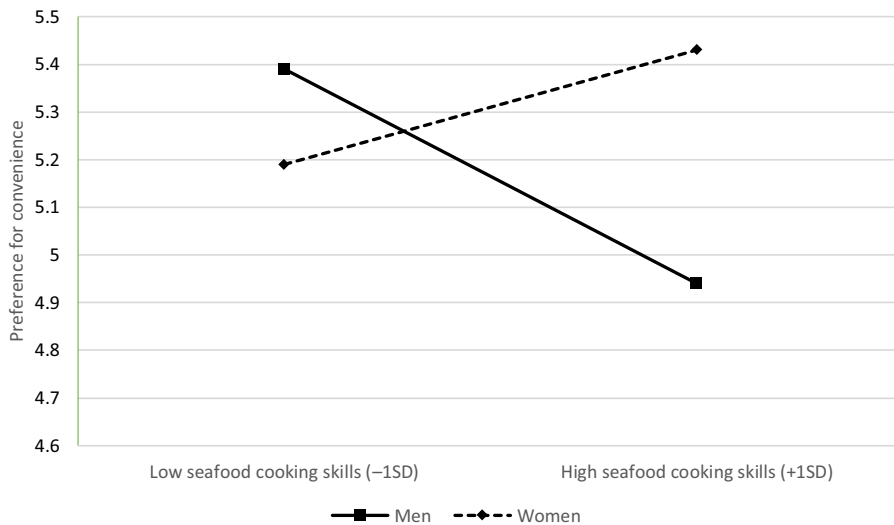
preference for convenience: $\alpha = 0.81$). Further, we examined common method variance by performing the Harman's single factor test (Podsakoff *et al.*, 2003). According to this test, if only one factor accounts for the majority of the explained variance (50% and above), it could be a sign of common method variance. The results showed that 30.45% of the variance was explained by a single factor, so the common method variance was unlikely to present a significant problem in our study.

Next, using an independent *T*-test, we tested whether confidence in seafood cooking skills differed between men and women, without controlling for demographic factors. The obtained results revealed that men ($M = 5.39$, $SD = 0.91$) were significantly more confident in their seafood cooking skills than women ($M = 5.09$, $SD = 1.21$), $t(512) = 3.07$, $p = 0.002$. No difference between men ($M = 5.88$, $SD = 0.85$) and women ($M = 5.92$, $SD = 0.91$) was found for general cooking skills, $t(512) = -0.55$, $p = 0.245$. This indicates that preparing seafood is a form of cooking that is particularly attractive to the masculine cooking identity.

We then performed an ANCOVA to test whether the relationship between gender and seafood cooking skills was still significant when controlling for socio-demographic factors. This analysis showed that the effect of gender was no longer statistically significant ($F = 2.50$, $p = 0.11$). A further analysis in which we tested the individual impact of each control variable, showed that age was the contributing factor in reducing the effect of gender. To explore this issue more thoroughly, we conducted an additional ANOVA to examine the potential interaction effect between age (grouped into 18–35, 36–50, and 51 years plus) and gender on cooking skills. This analysis showed that gender and age interacted significantly in explaining cooking skills ($F = 3.88$, $p = 0.025$), indicating that men's higher confidence in seafood cooking skills was only the case at certain ages. A simple effects test showed that within the age group 18–35 years, men ($M = 5.14$, $SD = 0.15$) were significantly more confident in their seafood cooking skills than women ($M = 4.61$, $SD = 0.10$), $p = 0.004$. The same pattern was seen for the age group 36–50 years, in which men ($M = 5.15$, $SD = 0.12$) seemed more confident than women ($M = 4.97$, $SD = 0.10$) in their seafood cooking skills, but the difference was not significant ($p = 0.24$). In the age group 51 plus years, there was an opposite tendency, in which men ($M = 5.68$, $SD = 0.10$) seemed slightly less confident in their seafood cooking skills than women ($M = 5.78$, $SD = 0.11$), but this difference was also insignificant ($p = 0.46$). These results suggest it is only among younger people that men are more confident than women in being skillful at cooking seafood. Hence, [hypothesis 1](#) was only partially supported.

Next, we tested [hypothesis 2](#) estimating a moderation model using Hayes' procedure (2013; model 1). In this model, convenience preference was expressed as a function of gender (1 = women, 0 = men), confidence in seafood cooking skills (as a continuous and mean-centered variable) and the interaction of these two variables. We also included all of the demographic variables as covariates. The analysis revealed that the main effect of seafood cooking skills on convenience preference was negative and significant ($b = -0.23$, $p = 0.009$). More importantly, the interaction between seafood cooking skills and gender was significant and positive ($b = 0.27$, $p = 0.007$), indicating that the relationship between seafood cooking skills and convenience preferences is dependent on gender. We further probed this interaction by estimating the conditional effects of gender on seafood cooking skills at one SD below and above the mean of seafood cooking skills. The results showed that, consistent with [hypothesis 2](#), men with higher confidence in their seafood cooking skills reported a lower preference for convenient seafood ($M = 4.94$) than women with higher confidence in their seafood cooking skills ($M = 5.43$), $b = 0.48$, $p = 0.002$. Those with lower confidence in seafood cooking skills showed no difference in convenience preference as a function of whether gender was male ($M = 5.39$) or female ($M = 5.19$), $b = -0.2$, $p = 0.24$ (see [Figure 2](#)).

In other words, preference of convenient seafood solutions varies between genders only when consumers have higher confidence in their seafood cooking skills, indicating that



Role of identity and gender in seafood cooking

Figure 2. Preference for convenient seafood solutions as a function of gender and confidence in seafood cooking skills

convenient food solutions may play a diverging role between genders depending on the identity relevance of being competent and skillful in preparing seafood. The results also show that the preference for convenient seafood solutions is significantly lower among men with high ($M = 4.94$) versus low ($M = 5.39$) confidence in seafood cooking skills ($b = -0.18$, $p = 0.029$), while there is no difference in convenience preference between more and less confident female seafood cooks. This provides further evidence that men with high confidence in their seafood cooking skills want to distance themselves from convenience food, a need that is not present when their confidence in these skills are low.

5. Discussion

The purpose of this study was to explore whether consumers' confidence in cooking skills related to seafood differed across genders, and if such difference could be explained by the identity-relevance of seafood cooking for men. This is an issue associated with gender stereotypes and normative expectations, in which men is often viewed as prestige-seeking cooks who prepare food for special occasions, whereas women are seen care-oriented cooks who prepare everyday meals for the family (e.g. Kelly, 2015; Neumann *et al.*, 2017b). Asking consumers directly about how they relate to such roles could be affected by social desirability or self-presentation biases (Kimura *et al.*, 2009). Thus, we rather chose to focus on the assumed core element of men's cooking identity: their cooking skills (Cairns, 2010), and an assumed consequence of such an identity: resistance to convenient cooking solutions (Leung *et al.*, 2018). Together, these factors have let us make inferences about the potential identity motivation of male cooks, and at the same time, have helped us overcome potential issues of stereotyping and normative pressures when examining gender-based food behaviors (Kimuara *et al.*, 2009).

Our findings, obtained from a survey with a representative sample of Norwegian consumers, showed that younger men are more confident than younger women in preparing seafood. Further, the results showed that men (versus women) with high confidence in their seafood cooking skills have a lower preference for convenient seafood solutions, indicating that these men may be more reluctant to use food products that could hinder the cooking outcome being attributed to their cooking skills (Leung *et al.*, 2018). This gives support to our

proposition that confident male seafood cooks are highly driven by manifesting a masculine identity as skillful in the home kitchen.

These results contribute to the literature in several ways. First, by showing that younger men have higher confidence in their seafood cooking skills compared to younger women, this research adds nuance to the current understanding of gender and cooking skills. Most research indicates that men have inferior cooking skills compared to women (Caraher *et al.*, 1999; Hartmann *et al.*, 2013; McGowan *et al.*, 2017). This study shows that this might not be the case, at least among Norwegian consumers. Indeed, in the context of seafood cooking, men might be superior to women in terms of perceived cooking skills. This finding aligns with the general trend of men becoming increasingly skilled cooks as this let them take responsibility for everyday meal preparation (Neuman *et al.*, 2017b). This might also be explained by the identity-relevance of seafood and fishing for many Norwegian men, which would be a strong motivation to enhance their cooking skills related to this particular type of food.

Second, the results showing diverging preferences for convenience solutions between men and women with high confidence in cooking skills could be an indication of a difference in how the two genders function in relation to preparing food. While the traditional masculine cooking role has been to cook for special occasions, driven by prestige, entertainment and a need to show one's competence (Cairns *et al.*, 2010; Kelly, 2015), some research suggests that modern men increasingly take on a more "feminine" role of preparing everyday meals to care for the family (Neumann *et al.*, 2017b). Our findings indicate that men should indeed have the ability to take care of everyday cooking for the family, being as confident as women in their cooking skills. However, our findings also indicate that men's cooking motives might still be rooted in the traditional masculine role of cooking for prestige and entertainment. When men of high confidence in their cooking skills show lower reliance on convenience products and instead seek food ingredients to prepare a meal from scratch, they may be seeking a way to project their confidence in cooking skills to the outside world. They may also have such preferences because they enjoy using their skills. Based on the theory posed earlier in this paper (Szabo, 2014; Young *et al.*, 2016), both reasons could be explained by evolutionary psychology which, despite feeding gender stereotypes, implies that men are attracted to hunt and slaughter, which they project as means of attracting a mate for whom they can provide food and ensure physical health.

Many women are also attracted to developing an identity as competent in the home kitchen, but would to a larger extent than men feel a conflict between cooking for self-realization and cooking to care for others (Cairns *et al.*, 2010). Thus, women are more disposed to make cooking choices that compromise an identity related to being a skillful and competent cook. For instance, as seen in this study, women with high confidence in seafood cooking skills have a relatively high preference for using convenient solutions in their seafood cooking. This could indicate that they would rather prioritize the needs of their loved ones, such as providing food in a timely manner or meeting their kids' preferences, than maintaining an image as a competent cook.

Third, this study contributes to the literature on identity in food-related consumer behavior. Previous research has been mainly interested in how strategically choosing (Rosenfeld and Burrow, 2017) or not choosing (Cronin *et al.*, 2014; James, 1982) certain types and quantities of food for consumption enables consumers to express their food-related identities. This study suggests that food-related identity might also be related to the food products consumers choose as ingredients when cooking. Specifically, we suggest that a consumer with a strong identity attached to being a competent cook would strategically choose ingredients that would allow him or her to attribute the cooking outcomes to his or her cooking skills. This would involve choosing products that are not perceived as convenient food solutions, solutions that make cooking faster and simpler for instance, because those

with a strong cooking identity would presumably see them as “cheating” and not a reflection of who they are as cooks.

Fourth, this study adds to the literature on convenience food products. Previous studies discussing the negative effects of such products focus primarily on health (Olsen *et al.*, 2009; Van der Horst *et al.*, 2011). By indicating that convenient seafood products may compromise men’s cooking identity, this study provides a novel explanation for why convenient food products may be unfavorable. This might explain previous findings which show that men who use convenience products feel a need to justify doing so as related to time constraints or their children’s preferences and not a lack of cooking skills (Neuman *et al.*, 2017b).

5.1 Practical implications

Seafood companies are continuously developing new convenience products that should make cooking simpler and quicker. One of the reasons for developing such products is to help consumers who lack cooking skills with preparing successful seafood meals. This study suggests that such products may not be desirable for all consumers and that gender and cooking skills could be decisive factors in this regard. Seafood producers and retailers could therefore benefit by segmenting consumers based on these two factors and tailoring product offerings and communication appeals based on each segment’s preferences for convenience.

For instance, based on the current literature on convenience products and gender (Ahlgren *et al.*, 2006; van der Horst *et al.*, 2011), it is likely that seafood producers and retailers are developing strategies based on the notion that men are the most attractive target group for convenience products. This study shows that men vary significantly on preferences for such products based on their cooking skills and suggests that some men have a strong cooking identity which makes them less willing to use convenient seafood solutions. Seafood producers and retailers must therefore be careful when targeting men for convenience products. If they target men who attach a strong identity to being a competent seafood cook, they may experience low adoption rates and the possibility of negative word of mouth. These companies should therefore distinguish between men with low and high confidence in their seafood cooking skills, with the former as a target for convenience products and the latter as a target for more advanced seafood products.

Seafood companies may also try to analyze whether there are certain convenience features that do not compromise the cooking identity of highly skilled men, and therefore are features they may appreciate despite simplifying the cooking process. If so, seafood companies may be able to develop products that appeal to men with both high and low cooking confidence. For instance, when salmon fillets first came on the market, they made cooking easier for many consumers, being boneless and sold in pre-cut serving sizes (Onozaka *et al.*, 2014). However, they still provided plenty of opportunities for experimentation and more advanced cooking, as they could be prepared in various ways and used in a range of recipes. As such, they allow cooking outcomes to be attributed to the skills of the cook. Seafood companies should aim to develop similar products to the salmon fillet, which could appeal to both those who prefer convenience and those who like to challenge their higher cooking skills. If a company already has such products, they may focus on developing balanced marketing messages that show consideration for the needs of both groups. For instance, if a seafood company sells salmon fillets or similar products, they should emphasize taste and versatility as much as convenience in order to avoid pushing away men with strong cooking identities.

A social implication of this study could be to utilize the confident and skilled male home cooks to change the image still apparent in many cultures that everyday cooking is a feminine activity. Potentially due to varying levels of gendered upbringing, as well as stereotypes portrayed by media, males and females develop their identities around food preparation in different ways. A central element of the male cooking identity has been to cook for special occasions, such as weekends, or over a barbecue (Roos *et al.*, 2001) – supposedly as these are

situations in which men could impress with their cooking skills. Our study, however, indicates that men could also use aspects available in everyday cooking, such as making food “from scratch” or avoiding convenient cooking solutions, in order to signal their cooking skills. This could motivate men to take more responsibility for everyday cooking as it allows them to maintain their competence-oriented cooking identity while differentiating from the notion of feminine care-oriented cooking. As such, the confident male home cooks identified in this study could potentially be an important counter-pole to the traditional man who cooks as a temporary and voluntary leisure activity (Swenson, 2009) – instead contributing to creating an “alternative” cooking masculinity that embraces gender-equal contribution to the household’s foodwork (Szabo, 2014).

5.2 Limitations and future research

Our findings do not imply that people’s consumption motives are the same across situations. Based on our theorizing, men with high confidence in their seafood cooking skills should show opposition to convenience solutions only when they prepare foods for identity reasons. Sometimes these men could be in non-identity situations, for instance when they need some quick food in a hectic, everyday situation. In such situations, their resistance to convenience food should decrease. Similarly, our findings might not be applicable to men who live alone, as identity expressive cooking should be more important in the presence of other people (Reed *et al.*, 2012). Indeed, people who live alone tend to experience cooking more as a necessity than as a pleasure or a hobby (Daniels *et al.*, 2012). Then, the benefits of convenient food solutions would presumably outweigh the potential negative aspects of using such products.

This study argues that the lower convenience preferences for men with high confidence in their seafood cooking skills could be explained by these men’s need to express their identity as seafood cooks. However, we do not measure identity and therefore do not test this proposition directly. Thus, we cannot exclude alternative explanations for why these men show a lower preferences for convenient seafood solutions. For instance, it may be that men with high confidence in their cooking skills would rather make food from “scratch” due to taste motives, health motives or caring motives. However, since the “convenience resistance” effect only occurs for men, and as there are no indications in the literature of men being more concerned about health, taste or caring than women, we believe the most likely explanation is related to the traditional belief of men as highly driven by prestige, enjoyment and expressing their skills when cooking (Fürst, 1997; Kelly, 2015).

The results indicating that men have greater confidence in their seafood cooking skills may not be generalizable to other countries. Scandinavian men report that they take part in food preparation more than other European men (Neuman *et al.*, 2017a), and seafood is more important in Norway than in many other countries (Olsen, 2001). Nonetheless, the identity-based explanation for what motivates men with higher cooking skills, as well as how this affects their preference for convenience food, is rooted in an evolutionary understanding of gender differences (Szabo, 2014; Young *et al.*, 2016) and should be applicable across countries and cultures.

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Corresponding author

Anders Wien can be contacted at: awi023@uit.no

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