Situating Advice Response Theory in a Cultural and Relational Context:

How Hispanic Adults Perceive Exercise Advice from Parents

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Abstract

We analyzed how Hispanic participants in early adulthood (*N* = 275) responded to parental advice about physical activity. We tested and extended advice response theory (ART) by contextualizing ART predictions within the cultural, relational, and topical context of this study and by articulating the role of receptiveness in the model. Overall, ART predictions were supported: Participants were more likely to implement advice and rate it favorably when they perceived the advice was efficacious in solving the problem and did not threaten their positive face (i.e., insult or shame them). Positive facework ratings were also associated with better coping and impact on exercise. Participants’ open-ended advice descriptions revealed distinctions between messages rated low or high in efficacy and positive facework. Receptiveness mediated the influence of relational satisfaction and parent expertise ratings on advice evaluations and was directly, positively associated with all advice outcomes. We discuss implications for ART and intercultural research.

*Keywords*: Interpersonal communication, advice, parent-child communication, Hispanic, exercise

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In the United States, fewer Hispanic individuals meet exercise recommendations compared to those from other racial and ethnic groups (USDHHS, 2018). Promoting exercise in Hispanic populations is crucial; exercise protects against cardiovascular disease and diabetes, two diseases that have been historically and disproportionally prevalent in Hispanic populations (Velasco-Mondragon, Jimenez, Palladino-Davis, Davis, & Escamilla-Cejudo, 2016). Promoting physical activity (henceforth PA) in early adulthood (late teens to mid-30s) is particularly important, as a lack of PA in early adulthood influences cognitive abilities during mid-life (Hoang et al., 2016) and is predictive of mid-life inactivity (Pinto Pereira & Power, 2017). Parental encouragement is particularly effective for fostering exercise intentions among Hispanic individuals (de la Haye, de Heer, Wilkinson, & Koehly, 2014), and parental support is associated with higher levels of youth PA (Mendonca, Cheng, Melo, & Cazuza de Farias Junior, 2014; Yao & Rhodes, 2015). Parental advice presents a strategic avenue for promoting PA in early adulthood, given that Hispanic populations often seek health advice from family members (Shavitt et al., 2016) and feel a strong sense of obligation to the family when making decisions (Campos & Kim, 2017). However, parental advice is not uniformly well-received or followed by Hispanic children (Holloway, Park, Jonas, Bempechat, & Li, 2014). Therefore, understanding how Hispanic adult children evaluate and respond to parental advice is necessary to facilitate desirable parental advice outcomes.

Advice is defined as a message or series of messages that suggest how to behave, feel, or think about a problem (MacGeorge, Feng, & Guntzviller, 2016). Advice is often embedded and best understood within the broader conversation (MacGeorge, Guntzviller, Branch, & Yakova, 2015). In the Hispanic community, it is customary for parents to provide lengthy and emotionally charged *consejos,* or parental advice lectures,to display concern for and engagement with their children (Alfaro, O’Reilly-Díaz, & Lopez, 2014; Holloway et al., 2014). Advisors may intend for advice to be supportive, informational, and/or influential (MacGeorge, Feng et al., 2016), but advice recipients can perceive advice, specifically advice about exercise, as overstepping, hurtful, and relationally-damaging (Burke & Segrin, 2014; Guntzviller, Ratcliff, Dorsch, & Osai, 2017). Advice response theory (ART) predicts how the advice recipient’s perceptions of the advisor and advice message features drive the recipient’s emotional response and willingness to follow the advised action (Feng & MacGeorge, 2010; MacGeorge, Guntzviller, Hanasono, & Feng, 2016). However, the interpretation of advice varies culturally (Feng, 2015; Feng & Feng, 2018; Feng, Zhang, Huang, & Hong, 2016). ART research has predominantly been conducted in non-Hispanic European American populations, friend-to-friend relationships, and about non-health related matters (see MacGeorge, Feng et al., 2016 for a review). We contribute to advice research and ART extensions by drawing from conceptualizations of advice as intercultural communication (Chentsova-Dutton & Vaughn, 2012; Feng, 2015) to describe how ART propositions can be contextually-situated within the advisor-advisee relationship, advice topic, and ethnic heritage of the recipient. Specifically, we examine how individuals who are in early adulthood, live in the United States, and self-identified as Hispanic or Latino(a) responded to exercise advice from a parent.

We describe ART and discuss which elements of the parent-child relationship, exercise topic, or Hispanic culture might refine, modify, or support ART predictions. Based on ART, we propose participants’ perceptions of their parents’ expertise, the parent-child relationship, and their receptiveness to advice will impact their evaluations of advice message features. ART posits that recipients’ evaluations of advice message features focus on the advised solution (e.g., ability of the advised action to solve the problem) and politeness of the advice (i.e., facework, or the regard for the recipient’s desired social image as liked, capable, and autonomous; MacGeorge, Feng, Butler, & Budarz, 2004). Recipients’ evaluations of these message features affect their advice outcomes, such as their perceptions of the advice quality, their coping, and the extent to which they implement the advised solution (MacGeorge, Feng et al., 2016). We extend ART propositions by articulating how advice recipient receptiveness to advice and obligation to their parents will function in the advice response model (see Figure 1 for an overview of study hypotheses). We begin by discussing advice interpretation through an intercultural lens.

**Cultural Interpretation of Advice**

The meaning of advice is culturally defined (Feng, 2015) and therefore requires a cultural understanding of relationships and relational communication (Chentsova-Dutton & Vaughn, 2012). The value European Americans place on forming and achieving personal goals shapes the interpretation of advice and understanding of how advice should be given (Chentsova-Dutton & Vaughn, 2012). Goldsmith and Fitch (1997) suggest that within U.S. White, middle-class populations, advisors need to manage the tension between being seen as “butting in” and being helpful, and that advice recipients are concerned with their right to make their own decisions while still appreciating the advice. Thus, advice may hurt or damage relationships (Goldsmith & Fitch, 1997), as recipients might rebel against receiving advice (Goldsmith, 2000) or against the advised solution (Guntzviller, Ratcliff et al., 2017). Advice research has been predominantly conducted within non-Hispanic European American populations, particularly with young adults and college students (MacGeorge, Feng et al., 2016), and therefore has treated these cultural values and subsequent interpretations of advice as normative (Soliz & Phillips, 2017).

Not all cultural groups value independent decision making or view advice as potentially intrusive (Feng & Feng, 2018). For example, Chinese individuals are more likely to provide advice and perceive it as demonstrating caring and friendship than European American individuals (Feng, 2015). Within East Asian cultures, direct emotional expression is not highly culturally valued and therefore warmth and caring are demonstrated through relational communication such as advice rather than through explicit emotional statements (Campos & Kim, 2017). Additionally, Russian individuals provide advice frequently and view advice as the most valued form of support, regardless of whether advice is solicited or not, because Russian culture values information exchange and practical interdependence between relational partners (Chentsova-Dutton & Vaughn, 2012). Thus, the advisor-recipient cultural context is crucial to understanding advice responses (Chentsova-Dutton & Vaughn, 2012; Feng & Feng, 2018).

Hispanic individuals are also likely to receive advice, particularly from parents, and view it as a normative and nurturing communicative practice (Alfaro et al., 2014; Holloway et al., 2014). Hispanic parental advice seeks to influence the recipient while also displaying parental caring and involvement in the child’s life (Valdés, 1996). Parents may give *consejos,* or advice “lectures” or narratives, which are meant to motivate based on a sense of familial duty embedded in *familismo* (Alfaro et al., 2014; Valdés, 1996). Familismo is the cultural expectation that family relationships are close bonds of love and obligation and are characterized by supportive, emotionally-positive interactions (Campos & Kim, 2017; Hernández, & Bámaca-Colbert, 2016). Although familismo can be present across cultures, it is particularly valued and emphasized within Hispanic families (Campos & Kim, 2017). Parent behaviors that align with familismo include expressions of warmth and support but also close monitoring and discipline of children (Hernández, & Bámaca-Colbert, 2016). Thus, parent advice is meant to help problem-solve and motivate the child while also conveying empathy, compassion, and cultural and familial expectations (Alfaro et al., 2014; Holloway et al., 2014). However, advisor intentions may not be recognized by advice recipients (Guntzviller & MacGeorge, 2013), even within the same cultural context (Holloway et al., 2014). Thus, how advice recipients evaluate and respond to advice messages is important in understanding advice impact on recipient emotions and behaviors. ART provides a framework for understanding advice recipient responses but needs to be contextualized with the cultural and relational understanding of advice.

**Advice Response Theory and Exercise Advice in Hispanic Families**

ART posits that advice recipients evaluate the advisor (e.g., advisor characteristics, their relationship) and the advice message features, and that these evaluations impact their emotional and behavioral response. Although ART has not explicitly addressed how specific cultural, relational, or topical contexts influence advice recipients’ response to advice, situating advice interpretation within these elements demonstrates how ART can be applied to various contexts.

One of ART’s major claims is that advice recipients will evaluate advice message features and that the perceptions of these message features will drive recipients’ overall response to advice (MacGeorge, Feng et al., 2016; see Figure 1). Recipients evaluate advice message features on two overarching elements: the *content* of the advised solution and the politeness, or *facework*, of the advice (Feng & MacGeorge, 2010). Recipient evaluations of these message features influence the immediate message evaluation of *advice quality* (i.e., advice’s helpfulness, sensitivity, and appropriateness) and conversational outcomes such as recipients’ *coping* with the problem and whether recipients *intend to implement* the advised action (MacGeorge, Feng et al., 2016). Recipients may not specifically follow their parents’ suggestion (e.g., sign up for soccer) but may find the advice motivates other PA behavior (e.g., to start running; Beets, Cardinal, & Alderman, 2010). Therefore, we include an additional outcome variable: *impact PA*, representing the extent to which the advice affected recipient PA beyond advice implementation.

**Advice message content.** When individuals receive advice, they assess the suggestion itself. Specifically, recipients assess the advice’s (a) *efficacy*, whether the advice will help the recipient solve or prevent the problem, (b) *feasibility*, whether the advice is easy to carry out and achievable for the recipient, and (c) *absence of limitations,* whether the suggestion lacks barriers or deterrents to performing the recommendation (MacGeorge, Feng et al., 2016). Advice high in these three features has been associated with favorable ratings of these features by European Americans (Feng & Burleson, 2008). Greater recipient ratings of these features has corresponded with increased advice quality and coping ratings, and even more strongly with behavioral outcomes (e.g., increased implementation intention; Feng & Feng, 2013; MacGeorge, Guntzviller et al., 2016). Research comparing European American to Chinese college students supported that message content evaluations were positively associated with advice outcomes in both samples, although the strength of the associations differed slightly (Feng & Feng, 2013). The cultural context may not alter the proposition that advice recipients more favorably view efficacious, feasible, and drawback-free advice, but relational and topical context might.

The relational and topical context of advice giving also needs to be culturally considered. Guntzviller, Ratcliff et al. (2017) examined parental advice on exercise in European American college students and found the opposite effect: Higher message content ratings were associated with undesirable outcomes. The authors proposed the European American emphasis on accomplishing goals independently (Chentsova-Dutton & Vaughn, 2012) may be even stronger in emerging adult populations who are concerned with establishing autonomy from parents. Thus, within the cultural (European American emerging adults) and relational context (parent to child), advice that overtly emphasizes its benefits may be perceived as butting in or overstepping the fine line between support and autonomy (Hill, 2018). Because of familismo and the cultural understanding of consejos, Hispanic emerging adults likely view parental advice as normative, expected, and demonstrating of concern and caring (Holloway et al., 2014). Therefore, we propose the original propositions of ART will hold in a Hispanic sample due to the culturally normative practice of parental advice:

**H1:** Higher recipient-evaluated message content (i.e., efficacy, feasibility, and absence of limitations) will be associated with higher advice outcome ratings (i.e., advice quality, facilitation of coping, implementation intention, and impact on PA).

**Advice politeness.** ART proposes that advice that attends to a recipient’s face—the recipient’s social identity—is better received (Goldsmith & MacGeorge, 2000). Advice may contain *negative facework*, which addresses the recipient’s need to be independent and autonomous, and *positive facework*, which addresses the recipient’s need for belonging and acceptance (Feng & MacGeorge, 2010). Recipient facework ratings are often one of the strongest predictors of all recipient outcomes across topical and relational contexts in European American samples (Guntzviller, Ratcliff et al., 2017; Feng & MacGeorge, 2010; MacGeorge et al., 2004). ART posits that facework ratings are especially influential on emotion-based outcomes, such as advice quality and facilitation of coping (MacGeorge, Guntzviller et al., 2016).

Attending to negative facework by suggesting rather than ordering a partner to exercise better facilitated exercise behaviors in European American couples (Burke & Segrin, 2014). However, the Hispanic cultural norms of giving more direct advice than European Americans (Fitch, 1994) and parent consejos practice (Holloway et al., 2014) may cause participants to perceive advice with more negative facework to be too tentative, whereas low negative facework may be seen as culturally normative. Thus, we propose a research question:

**RQ1:** Will recipient-evaluated negative facework be positively or negatively associated with advice outcome ratings (i.e., advice quality, facilitation of coping, implementation intention, and impact on PA)?

For positive facework in a PA context, European American parents who conveyed acceptance to their teen when discussing weight loss and exercise facilitated better outcomes for health-motivated teens (Dailey, Thompson, & Romo, 2014). Because of familismo expectations, high quality support demonstrating warmth and positivity can increase Latino health outcomes (Campos & Kim, 2017). For example, Hispanic parents’ praise and positive comments about their adolescent’s PA behaviors corresponded with their child exercising more (Arredondo et al., 2006). Moreover, because positive facework and warmth is a fundamental communication expectation in familismo, a lack of positive facework in parent-child communication can have detrimental outcomes (Campos & Kim, 2017). Thus:

**H2:** Higher recipient-evaluated positive facework will be associated with higher advice outcome ratings (i.e., advice quality, facilitation of coping, implementation intention, and impact on PA).

**Obligation as a moderator.** ART predicts recipient traits will moderate the relationship between message feature evaluations and advice outcomes (Bodie & MacGeorge, 2015). Hispanic children feel high degrees of obligation towards their parents (Harwood, Leyendecker, Carlson, Asencio, & Miller, 2002) and a duty to respect and assist their parents (Harwood et al., 2002; Kiang & Fuligni, 2009). Previous research has found that obligation to the family affected the performance of PA for Hispanics and recommended addressing the obligation to attend to family needs when promoting or recommending exercise (Eun-Ok et al., 2010). Among European American families, emerging adult children’s evaluations of parental advice message features (i.e., content and politeness) and advice outcomes was moderated by recipient feelings of obligation (Guntzviller, Ratcliff et al., 2017). Given the cultural salience of obligation in Hispanic families, we considered the potential moderating role of recipient obligation:

**RQ2**: Will obligation moderate the relationships between message content and politeness, and overall advice outcome ratings (i.e., advice quality, facilitation of coping, and implementation intention)?

**Advisor characteristics and recipient receptiveness.** ART posits that advice recipient perceptions of advisor characteristics and the advisor-recipient relationship influence their perceptions of the advice (Feng & MacGeorge, 2010; Guntzviller, MacGeorge, & Brinker, 2017; MacGeorge, Guntzviller et al., 2016). Favorable perceptions of the advisor can increase ratings of advice messages features (i.e., content and facework), and therefore facilitate desirable outcomes (MacGeorge, Feng et al., 2016). Within European American samples, children who were more satisfied with the parent-child relationship and viewed their parents as experts on PA had more favorable advice evaluations and better advice outcomes (Carlson, 2016; Guntzviller, Ratcliff et al., 2017). We expect these ART propositions will apply to Hispanic advice recipients. Hispanic adolescents viewed parent advice more favorably when they were close with the parent and the parent had expertise on the topic (Holloway et al., 2014). Moreover, Mexican-American parents who were closer to their children were more likely to encourage their children to do PA, increasing both child and parent PA behaviors (de la Haye et al., 2014).

Scholars have noted that recipients’ receptiveness to advice will impact their responses to advice (MacGeorge et al., 2004). Within past ART studies using European American samples, recipients who perceived advisors had greater expertise and reported closer advisor-recipient relationships were more receptive to advice (Feng & MacGeorge, 2006), and those more receptive to advice reported higher advice quality and coping (MacGeorge et al., 2015). These findings indicate that receptiveness mediates recipient perceptions of the advisor (i.e., expertise and relational satisfaction) on their advice message feature evaluations. However, these claims have not been formally tested. Additionally, findings in European American samples have varied on whether advisor characteristics have direct effects on advice outcomes (see MacGeorge, Guntzviller et al., 2016 for a discussion). We extend ART propositions by formally including the receptiveness variable in the model and test whether direct effects are relevant to this context:

**H3:** Recipient ratings of parental expertise and parent-child relational satisfaction will be positively associated with message content (i.e., efficacy, feasibility, and absence of limitations) and advice politeness (i.e., positive facework and negative facework) as mediated through their positive association with advice receptiveness.

**RQ3**: Will recipient ratings of parental expertise, parent-child relational satisfaction, and advice receptiveness be directly associated with advice outcome ratings (i.e., advice quality, facilitation of coping, implementation intention, and impact on PA)?

**Method**

**Participants and Procedures**

Participants were recruited via a Qualtrics panel (*N* = 275). To qualify for the study, participants had to live in the United States, self-identify as Hispanic or Latino(a), be 18 to 35 years old, and have received advice from a parent about physical activity or exercise in the past year.1 Participants reported on advice from their mother (*n* = 195, 70.9%) or father (*n* = 78, 28.6%; 2 missing). Participants were 24.11 years old (*SD* = 5.01) on average and predominantly female (*n* = 235). Most participants had some college education or equivalent (e.g., technical school; *n* = 156), although participants ranged from no education to having a Ph.D. Participants’ country of heritage included Mexico (*n* = 117), Puerto Rico (*n* = 31), Colombia (*n* = 16), El Salvador (*n* = 15), the Dominican Republic (*n* = 14), Cuba (*n* = 9), Guatemala (*n* = 5), Nicaragua (*n* = 5), Argentina (*n* = 4), Brazil (*n* = 3), Ecuador (*n* = 3), Spain (*n* = 3), Venezuela (*n* = 3), Honduras (*n* = 2), and one participant from Belize, Bolivia, Chile, Panama, Peru, and Portugal. Some participants had mixed heritage (*n* = 16) or did not answer (*n* = 23).

Participants first answered: “Has one or more of your parents given you advice about exercise or physical activity in the past year? Advice is a suggestion about *how to behave, feel, or think* about a problem” (formatting in original survey). Only participants who answered “Yes” were included. Participants were then prompted: “Please think of ONE SPECIFIC CONVERSATION in which your parent gave you advice about exercise or physical activity in the past year. For the following questions, when we say ‘your parent’ or ‘the advice,’ please think of this particular instance.” Participants answered open-ended questions to prompt their memory: “Please describe the exercise or physical activity issue that your parent gave you advice about,” “Please describe (as best as you can) the exact words that your parent used when giving you advice,” and “Please describe why you did or didn’t take your parent’s advice.” Close-ended questions asked how long ago the parent gave this advice and whether recipients took the advice (asked prior to the last open-ended question). Participants then responded to the measures below.

**Measures**

Confirmatory factor analyses (CFAs) were conducted in the *lavaan* package of R to confirm that items were loaded on the intended factor. An acceptable-fitting model should have a RMSEA < .08, a CFI > .90, and a SRMR < .08 (Kline, 2011). The measurement model demonstrated acceptable fit, χ2 (877) = 1338.39, *p* < .001, RMSEA = .04 [90% CI = .039, .049], CFI = .95, SRMR = .05. All measures were rated on a 5-point Likert-type scale (1 = *strongly disagree*, 5 = *strongly agree*) if not noted otherwise. The descriptive statistics, Cronbach’s alphas, and zero-order correlations of the study variables are presented in Table 1.

**Message content.** Three aspects of message content were evaluated: advice efficacy, feasibility, and absence of limitations. Feng and MacGeorge’s (2010) three-item scale was used to measure advice efficacy (e.g., “I believe that the advised action could help to improve my situation”). Advice feasibility was assessed with two items from MacGeorge et al. (2004; e.g., “The advice given is something I could do”). Additionally, participants evaluated the absence of limitations in the advice using three items from MacGeorge et al. (2004; e.g., “I predict that the advised action will have serious drawbacks” [reverse coded]).

**Message politeness.** Two aspects of message politeness were evaluated: advice negative facework and positive facework. Participants rated the advice’s negative facework by responding to four items modified from MacGeorge et al. (2004). Sample items were “The advice made it clear that I could choose whether or not to take,” and “The way my parent gave me advice showed consideration for my independence.” Positive facework was assessed using an eight-item scale adapted from previous studies (Feng & MacGeorge, 2010; MacGeorge et al., 2004). Items assessed issues of likeability (e.g., “The advice made me feel good about myself”) and competency (e.g., “The advice suggested I was lacking in ability” [reverse coded]).

**Advisor characteristics.** Participants rated two characteristics of the advisor: parental expertise on PA and parent-child relationship satisfaction. Three items were adapted from Feng and MacGeorge (2010) to measure participants’ perceptions of parents’ expertise regarding PA (e.g., “My parent has experience dealing with exercise or physical activities”). Following previous research that has adapted the Marital Opinion Questionnaire to examine parent-child relationship satisfaction (e.g., Schrodt & Afifi, 2007), ten items were measured on a 7-point semantic scale (e.g., 1 = *harmful*, 7 = *helpful*; 1 = *completely dissatisfied*, 7 = *completely satisfied*) to assess participants’ perceptions of relationship satisfaction with the advisor.

**Receptiveness.** Participant receptiveness to advice was measured with three items modified slightly from MacGeorge et al. (2015; e.g., “I wanted advice from my parent about this matter concerning exercise or physical activity.”).

**Obligation.** To assess participants’ feelings of obligation to take the advice, four items from Guntzviller, Ratcliff et al. (2017) were used. Sample items included: “After this conversation, I felt that I had to take this advice because it was from my parent,” and “After this conversation, I felt obligated to at least try the advice.”

**Advice outcomes.** Four advice outcomes were measured: advice quality, facilitation of coping, intention to implement the advice, and impact on PA. Participants rated the overall quality of advice using three items that assessed perceived helpfulness, supportiveness, and effectiveness of the advice (Goldsmith & MacGeorge, 2000; MacGeorge et al., 2004). Three items assessed coping facilitation (e.g., “After this conversation, I am better able to manage any emotional distress I have from the problem”) and three items measured intention to implement the advice (e.g., “I plan to follow the advice I was given”; MacGeorge et al., 2004). Lastly, a one-item measure was created to assess impact on participants’ PA (i.e., “How much did this advice conversation affect your physical activity or exercise with regard to the behavior in question?”). Participants rated this item using a scale ranging from zero to ten (0 = *did not affect*, 10 = *very much affected*).

**Results**

Path models were tested using the *lavaan* package in R (Rosseel, 2012). All variables were modeled as observed. Because missing data were less than .8%, expectation maximization was used to impute missingness. To account for the nonnormally distributed data, robust maximum likelihood estimation was used. Participant’s sex, age, the parent’s sex, and time since the advice was given were included as covariates in the models.2 Direct paths were drawn from the covariates to the advice outcome variables. The error variances of message evaluation variables (i.e., efficacy, feasibility, absence of limitations, positive, and negative facework) were correlated and the error variances of advice outcomes (i.e., advice quality, intention to implement, facilitation of coping, and impact on PA) were correlated.

To answer RQ3, whether direct paths from recipient perceptions of advisor expertise, relational satisfaction, and receptiveness to advice outcomes should be included, we compared two nested models: one with these direct associations (Model 1), and one without them (Model 2). Model 1 provided adequate fit, χ2 (24) = 35.09, *p* = .07, RMSEA = .04 [90% CI = .00, .069], CFI = .99, SRMR = .03, but Model 2 did not fit the data acceptably, χ2 (36) = 100.51, *p* = .00, RMSEA = .08 [90% CI = .063, .100], CFI = .96, SRMR = .04. Indeed, Model 1 fit was superior to Model 2, χ2diff = 65.42, dfdiff = 12, *p* < .001. Therefore, results of all the hypotheses and research questions were based on Model 1. The model (see Figure 2) explained 71.6% predicted variance in advice quality, 49.2% in implementation intention, 37.0% in coping facilitation, and 33.7% in impact on PA. Table 2 provides a summary of the unstandardized regression coefficients (*B*) and their standard errors (*SE*), and standardized regression coefficients (β).

## Evaluations of Advice Message Features and Advice Outcomes

H1 predicted that recipient-evaluated message content (i.e., efficacy, feasibility, and absence of limitation) would be positively associated with advice outcome ratings (i.e., advice quality, facilitation of coping, implementation intention, and impact on PA). Higher efficacy was associated with higher ratings of advice quality (β = .15, *p* = .004) and intention to implement the advice (β = .33 *p* < .001). Feasibility was positively associated with advice quality (β = .06, *p* = .098; albeit marginally) and impact on PA (β = .14, *p* =.009). Counter to predictions, absence of limitations was negatively associated with impact on PA (β = -.09, *p* = .04).

RQ1 questioned how negative facework would be associated with advice outcomes, while H2 proposed positive facework would be positively associated with outcome ratings. Negative facework was positively linked to evaluation of advice quality (β = .18, *p* = .01), but not the other three outcome variables. Higher ratings of positive facework were associated with higher ratings of advice quality (β = .39, *p* < .001), facilitation of coping (β = .39, *p* < .001), intention to implement the advice (albeit marginally, β = .15, *p* = .08), and impact on PA (β = .21, *p* = .04).

RQ2 inquired whether obligation would moderate associations between message features evaluation and four advice outcomes. Interaction terms were created by multiplying mean-centered variables. Each interaction term was individually added to the path model and a total of five moderated models were tested using *lavaan* in R. Of the 20 examined interaction terms (i.e., five for each of the four outcome variables), only one was statistically significant.3 H1 and H2 were partially supported4 and RQ2 was answered: obligation was not a moderator.

## Advisor Characteristics, Receptiveness, and Message Features

H3 predicted that recipient-evaluated parental expertise and parent-child relationship satisfaction would be positively associated with the five advice message feature evaluations, and that these associations would be mediated through advice receptiveness. Ratings of parental expertise and relationship satisfaction were positively associated with recipient receptiveness, and receptiveness was positively associated with three advice message feature evaluations (excluding feasibility and absence of limitations, see Table 2). Mediation analyses were conducted in R by computing bias-corrected bootstrapped confidence intervals (CIs) with 1000 random samples. Receptiveness mediated the effects between parental expertise and negative facework (β = .09, [95% CI = .03, .15]), positive facework (β = .11, [95% CI = .05, .15]), and efficacy (β = .11, [95% CI = .04, .15]). Similarly, receptiveness mediated the effects between relational satisfaction and negative facework (β = .05, [95% CI = .01, .07]), positive facework (β = .06, [95% CI = .01, .07]), and efficacy (β = .06, [95% CI = .01, .08]). In addition to mediated effects, parent expertise was directly associated with negative facework, positive facework, and efficacy; and relational satisfaction was directly associated with all five message feature evaluations (see Table 2). Associations between relationship satisfaction or parental expertise and feasibility or absence of limitations were not significantly mediated through receptiveness. H3 was partially supported.

## Ratings of the Advice Situation and Advice Outcomes

RQ3 asked whether parental expertise, parent-child relationship satisfaction, and receptiveness were directly associated with advice outcomes. As reported earlier, the model including direct associations fit significantly better than the model excluding direct associations. Parental expertise was not directly associated with any advice outcomes in the model. Recipient-evaluated parent-child relationship satisfaction was positively associated with advice quality (β = .19, *p* = .001). Advice receptiveness was directly associated with all four advice outcomes: advice quality (β = .11, *p* = .01), facilitation of coping (β = .21, *p* = .01), intent to implement (β = .19, *p* = .01), and impact on PA (β = .29, *p* < .001).

## Supplemental Analysis: Considering Message Features

The ART propositions tested in the current hypotheses were based on recipients’ evaluationsand perceptionsof advice messages. Advice research with European American participants has previously demonstrated that advice messages with explicit message characteristics led recipients to evaluate these message features as present (Feng & Burleson, 2008). For example, advice that explicitly stated how the advised solution solved the problem led recipients to rate the advice as higher in efficacy (Feng & Burleson, 2008). However, how message features drive perceptions may be culturally specific; for example, cultural groups conceptualize facework of advice messages differently (Feng & Feng, 2018).

To supplement our framing of advice as culturally-situated, we conducted an in-depth post-hoc examination of advice recipients’ open-ended recollections of the problems for which they received advice, the actual advice messages, and their reactions to the advice.­­ Because participant ratings of efficacy and positive facework were the most frequent and strongest4 message feature evaluations associated with outcomes, we focused on participant ratings of these two elements. Three authors examined the approximately 10% of participants who rated efficacy the highest (i.e., rated efficacy as a 5 out of 5, *n* = 33), and approximately 10% of participants who rated efficacy the lowest (i.e., rated as 2.33 or lower, *n* = 24). This process was then repeated for positive facework (i.e., rated positive facework as a 4.75 out of 5 or higher, *n* = 27; and rated positive facework as a 2.25 or lower, *n* = 29). We used latent content coding (Babbie, 2013) and coded in two rounds. We first independently made initial notes (i.e., open coding) and then created summative descriptions (i.e., axial coding; Glaser & Strauss, 1967). We then met to discuss, synthesize, and finalize themes.

**Efficacy.** Three main themes emerged from open-ended responses of participants who rated their parent’s advice as high or low in efficacy (see Table 3 for participant quotes within each theme). The first apparent difference between advice rated highly efficacious or inefficacious was *whether participants felt there was a problem to solve.* Some participants who rated the advice as low in efficacy did not see their weight or health behaviors as problematic. In contrast, participants who reported highly efficacious advice recognized there was a problem and felt the advice was motivating or helpful in solving the problem. Second, some participants indicated that *their need for independence caused them to consider the advice inefficacious*, which was sometimes coupled with the former theme of not thinking there was a problem.

The third theme between highly efficacious and inefficacious advice was *whether the advice was vague or contained information tailored to the individual*. Advice perceived as highly efficacious contained informational support that was often specific to the recipient’s problem. Some efficacious advice included workout-specific information, specific health advice (e.g., how to substitute an unhealthy behavior for a healthy one), or how to overcome barriers. In contrast, advice rated inefficacious was sometimes directive without specific information about how the recipient could accomplish the advice, beyond what the recipient already knew. Additionally, inefficacious advice did not seem tailored to participants’ unique problem or situation. Recipients felt the advice ignored barriers and did not address their circumstances. A small portion of inefficacious advice was informational but medically ill-advised (e.g., “Workout or even become bulimic I don’t care as long as you have a thigh gap” -*Female, 22,* #178).

**Positive Facework.** The main difference between low and high positive facework ratings was whether advice *insulted, judged, or shamed the recipient* (see Table 3). Participants who evaluated the advice as low in positive facework reported the advice included terms such as “ass,” “gut,” “butt,” “chubby,” and “fat,” including “fat cow,” “fat girl,” and “fatty.” Advice rated low in positive facework that was not insulting still often included negative judgments of physical appearance and indicated there was a certain ideal that participants should be trying to obtain. Some advice shamed the recipients’ weight in the name of health or indicated the participant’s appearance would deter romantic partners or embarrassed the parent. Advice rated highly for positive facework noticeably did not contain words that indicated judgment of physical appearance. Most high-rated positive facework advice was bald-on-record (i.e., explicit, not containing facework; Goldsmith & MacGeorge, 2000) and included directives such as “you should” or “you need.” Much of the bald-on-record advice centered on specific health or exercise issues, and recipients often indicated they needed or wanted advice on this topic. Advice that included positive facework elements—such as overt statements of love, affection, approval, or encouragement—was not common, as only four of the 27 examples included these elements.

**Discussion**

Our findings contribute to a growing body of research supporting ART predictions (MacGeorge, Feng et al., 2016), specifically in non-European American populations (Feng & Feng, 2013) and in parent-child relationships (Carlson, 2016; Guntzviller, Ratcliff et al., 2017). Overall, our findings suggest that ART is applicable to Hispanic parents’ exercise advice to their adult children and can be used cross-culturally by situating propositions within the cultural understanding of advice. Our findings supported ART propositions that recipient perceptions of advisor characteristics are positively associated with their message feature evaluations, and that message feature evaluations (specifically efficacy and positive facework) are positively associated with advice outcomes. Efficacy was the strongest predictor of intention to implement the advice, and positive facework was the strongest predictor of advice quality and recipient coping. These findings support ART claims that recipient evaluations of advised solutions as pragmatic and effective most strongly align with recipient subsequent behaviors, and that polite wording most strongly aligns with recipient emotional outcomes (MacGeorge, Guntzviller et al., 2016). Recipient receptiveness to advice has been discussed in previous ART research although never explicitly included in ART; thus, we also tested recipient receptiveness to advice. Receptiveness was directly and positively associated with ratings of all advice message features and advice outcomes; moreover, it mediated associations between advisor characteristics (i.e., advisor expertise and parent-child relationship satisfaction) and efficacy and facework. To obtain additional insights into advice rated the highest and lowest on efficacy and positive facework, we conducted a qualitative analysis of advice recipients’ open-ended descriptions of the received advice. Findings suggested that although recipient perceptions of advice elements may generalize across cultural contexts, the advice wording that leads to these perceptions may differ culturally. Along with suggesting how the parent-child relationship, PA topic, and cultural context individually and collectively contribute to understanding the findings that support ART, we discuss potential theoretical expansions.

## Importance of Positive Facework

In general, advice conversations are considered face-threatening across ethnicities (Kim et al., 2009). In the current study, participants’ perceptions of positive facework in their parent’s advice were associated with their advice quality ratings, coping, desire to implement the advice, and the impact on their overall PA. Positive facework attends to the recipient’s need to be liked and viewed as competent (MacGeorge, Lichtman, & Pressey, 2002). Recipients who were more satisfied with the parent-child relationship, who rated parents as higher in expertise, and who were more receptive to advice rated advice as higher in positive facework. These findings correspond with past research that suggests conveying liking and approval—and not criticizing and rejecting—is particularly important in the parent-child relationship (Hill, 2018), exercise context (Burke & Segrin, 2014), and within Hispanic families (Campos & Kim, 2017).

Quantitative analyses examined advice recipients’ *perceptions* of advice messages. To determine what wording aligned with these perceptions, we examined participants’ open-ended reports of advice message wording. Recipients who reported advice was very low in positive facework reported advice messages were insulting, judgmental, or shamed the recipient. Recipients rating advice high in positive facework reported messages that were bald-on-record (i.e., direct and explicit). MacGeorge et al. (2002) classified advice facework into three categories: aggravating or threatening face, blunt or bald-on-record, and mitigating or attending to face. Our findings aligned with the former two categorizations, but few highly-rated-positive-facework advice messages included specific statements of approval or warmth or mitigating language. We were initially surprised by the extent to which high positive facework advice was merely absent of aggravating language. However, the cultural understanding of parent *consejos*, in which parents give advice and “lectures” to simultaneously convey expectations, involvement, and caring (Alfaro et al., 2014; Holloway et al., 2014) may indicate that participants interpreted the act of advising to convey positive facework unless the advice explicitly contained language that countered these interpretations. In line with this interpretation, Colombian advisors were more direct and did not use linguistic markers of facework that American non-Colombians used when giving advice (Fitch, 1994). The strong quantitative association between relational satisfaction and positive facework ratings also supports this explanation; advice in satisfactory relationships may be viewed as supportive and caring (Holloway et al., 2014). This interpretation of advice dramatically differs from non-Hispanic, European American cultural understanding of advice, in which face-threat (rather than facework) is inherent in the act of advising (Goldsmith & Fitch, 1997). Additionally, because of the high value Latino families place on close, positive family relationships, failure to meet these expectations, such as through insults, judgments, and shaming, can have particularly detrimental outcomes on health and well-being (Campos & Kim, 2017). Thus, the strong impact of positive facework on advice quality and facilitation of coping, and statistically significant associations with all outcome variables supported ART propositions while also reflecting the unique cultural and familial context of Hispanic populations.

## Importance of Efficacy

Higher ratings of advice efficacy were associated with higher advice quality ratings and greater willingness to implement the advice; moreover, efficacy was the strongest predictor of the latter. Efficacy did not facilitate coping outcomes for our participants, which supports recent ART propositions that the content of the advised solution aligns with problem-solving behaviors, and therefore, is most influential for behavioral outcome (MacGeorge, Guntzviller et al., 2016). Advice feasibility and absence of limitations ratings were not significantly associated with the traditional ART outcome variables. These results, although not entirely consistent with ART, replicated Guntzviller, Ratcliff and colleagues’ (2017) findings that efficacy was the only message content variable that positively associated with parent exercise advice outcomes for non-Hispanic young adults. Relational satisfaction, advisor expertise, and receptiveness were positively associated with efficacy ratings.

The qualitative analyses added insight into what participants considered “efficacious” advice. First, some participants did not think their behaviors or health were problematic, and therefore the advice was not rated efficacious because no advice was needed. Advice is a speech act that implies there is a problem that the recipient needs advice in order to solve (Wilson, Aleman, & Leatham, 1998). Even though advisors may have felt the situation met these conditions, when recipients do not acknowledge there is a problem to solve they do not perceive advice interactions positively (Goldsmith, 2000). Participants who rated advice high in efficacy acknowledged (a) that there was a problem or issue to be addressed and (b) that the advisor could help (in line with Goldsmith, 2000; Wilson et al., 1998). These qualitative findings aligned with the quantitative findings that recipients who were less receptive rated advice as less efficacious (perhaps because they did not think there was a problem to be solved), and that recipients who perceived advisors were experts thought the advice provided a better solution.

Second, advice rated as efficacious was reported to serve some informational purpose and was tailored to the recipient’s situation. Advice has been conceptualized as a form of informational support (MacGeorge, Feng, & Burleson, 2011) and, in this context, recipients expected advice to function in that capacity. However, recipients did not consider advice to be efficacious when the information (a) was something they already knew or (b) did not take into account their personal barriers, circumstances, or limitations. In terms of the latter, researchers have debated whether efficacy, feasibility, and absence of limitations are distinct concepts or subdimensions of a latent concept (Guntzviller, Ratcliff et al., 2017; MacGeorge, Guntzviller et al., 2016). Our quantitative findings indicated these concepts are methodologically distinct, but these qualitative findings indicate recipients may not consider advice efficacious if the advice is not at least somewhat feasible and has major drawbacks.

Overall, quantitative and qualitative findings about efficacy aligned with ART (MacGeorge, Guntzviller et al., 2016), advice research in European American parent-child relationships (Carlson, 2016), parental exercise advice in European Americans (Guntzviller, Ratcliff et al., 2017), and broader advice research (Wilson et al., 1998). However, European Americans resist being told what to do (Fitch, 1994; Goldsmith & Fitch, 1997), particularly in parent-to-child exercise advice situations (Guntzviller, Ratcliff et al., 2017). The current findings showed limited evidence of reactance or rebellion to advice among Hispanic emerging adults, although some participants who rated advice as low in efficacy indicated they were independent individuals who did not need to be told what to do. Further, obligation to take the advice did not moderate the paths between message evaluations and outcomes in the current study. Reactance and rebellion may be less likely to occur in Hispanic familial advice contexts than in European American contexts. Parenting in Hispanic families often involves monitoring or controlling strategies, which may be atypical in non-Hispanic European American families (Hernández & Bámaca-Colbert, 2016). Moreover, giving advice is seen as involvement with the child’s life in Hispanic culture (Holloway et al., 2014). In sum, Hispanic children may be less inclined to display reactance to parent advice because of the normative expectations for parents’ involvement in children’s lives.

## ART Extensions

Our findings suggest that ART main propositions about the associations between an individual’s perceptions of advisor characteristics, message features, and advice outcomes may remain relatively consistent across cultures (e.g., Feng & Feng, 2013). However, how recipients respond to message wording and arrive at advice perceptions may differ based on cultural understanding of advice, the topic, and the relationship. Along with testing ART’s cross-cultural application, we proposed two main theoretical extensions. First, our research extended ART by articulating and testing the role of receptiveness in the advice model. ART propositions claim that perceptions of advisor characteristics (e.g., expertise; MacGeorge, Guntzviller et al., 2016) and the advisor-recipient relationship (e.g., relational satisfaction; Guntzviller, Ratcliff et al., 2017) will increase positive perceptions of message features. Our data indicated that relational satisfaction and perceptions of advisor expertise increased receptiveness to advice, and that all three factors were associated with positive advice message feature ratings. Moreover, receptiveness mediated some, although not all, of the effects of relational satisfaction and parent expertise on subsequent advice ratings and receptiveness was directly, positively associated with all advice outcomes. Because advice is perceived culturally as a way for Hispanic parents to participate in children’s lives (Holloway et al., 2014), unsolicited advice is common and adult child receptiveness to this advice likely varies. Fitch (1994) found that individuals in Colorado would not follow directives because they do not like being told what to do, but that individuals in Bogotá would not follow directives if the person giving the directive did not have the appropriate relationship and characteristics (specifically authority and trust). Hispanic adult children who are taught to value and respect family members’ input might still consider advice out of respect for the parent. Whereas non-Hispanic young adults who are not receptive to advice may rebel against advice and do the opposite of what the advice suggests (Guntzviller, Ratcliff et al., 2017), Hispanic adult children may simply not follow the advice if they perceive it is low on message content or politeness. The current findings support ART predictions about advisor characteristics’ impact (Guntzviller, MacGeorge et al., 2017) and extensions about receptiveness, particularly when interpreted through a cultural lens.

Second, we extended ART by examining a new dependent variable: impact on PA. This measure was only a single item, so findings are tentative. Receptiveness, positive facework, and feasibility were positively associated with impact on PA, in line with ART predictions, but efficacy was not statistically significant even though message content ratings are predicted to be most impactful on behavioral outcomes (MacGeorge, Guntzviller et al., 2016). Moreover, rating advice as having fewer limitations was associated with decreased impact on PA. Exercising has inherent drawbacks (e.g., time commitment, potential soreness). Potentially, recipients found it motivating when parents acknowledged that these barriers exist but should not prevent one from exercising. These findings may be specific to contexts in which “healthy” advice has inherent limitations. However, impact on PA is not necessarily a desirable outcome (e.g., the impact could be that participants stopped exercising) and not all parent solutions were medically advisable (as some of our qualitative examples demonstrated).

**Limitations and Future Directions**

As with all retrospective recall studies, our method allowed for the analysis of natural advice interactions but our findings are limited to participants’ memories and perceptions of conversations. For example, the advice messages were reported by participants and therefore may have been altered by participants’ memories and emotional responses. However, we still felt the reported advice messages were informative; for example, the highest rated positive facework messages were not overly affectionate, indicating that even if participants embellished positive elements of the message, overt affection was not normative. An experimental design is needed to test the impact of these message features. Additionally, future research should examine receptiveness and other situational features prior to the advice conversation to truly assess their predictive effect on advice evaluations. Because health-related conversations are likely common and ongoing within family relationships, perceptions of advice messages are likely situated within the parent-child communication style, and not only influenced by the wording of one conversation (Goldsmith, 2004). Longitudinal research is needed to establish causal claims and how perceptions of advice conversations change over time.

The current survey was in English, and therefore sample acculturation was relatively high. Participants who predominantly speak Spanish may culturally differ from the current sample, particularly if they also hold stronger cultural values. Moreover, most participants were female, and gender-specific elements may impact responses to exercise advice and cultural interpretations (e.g., body image perceptions).

A contribution of the current study is the addition of a single-item measure of advice behavioral impact. The repeated use of the implementation intention measure across previous studies has enabled comparisons across replications, but this measure may not fully capture the impact of advice and its implications. By examining advice behavioral impact, we open the door for future ART research to develop and use multiple-item measures of advice behavioral impact and explicate *how* advice impacts actual behaviors.

**Conclusion**

Scholars have noted that family social support is particularly important in interventions to increase PA in Hispanic adults (Ickes & Sharma, 2012). Echoing other scholars, simply encouraging communication between parents and children may not be sufficient; instead, interventions need to focus on the quality of communication (Baiocchi-Wagner & Talley, 2013). ART can be used cross-culturally to understand how advice messages lead to advice perceptions, which lead to outcomes. The cultural understanding of advice, particularly related to family communication, needs to be considered. Perceptions of advice message features and connections to advice outcomes may hold across cultures (Feng & Feng, 2013), but advice wording that leads to positive perceptions may be dependent on cultural norms surrounding advice. Future research can continue to explore how situating advice within the cultural understanding of the advisor-advisee relationship and advice topic can extend ART to various cultural contexts.

Footnotes

1PA studies vary in their definition of early adulthood, starting at 18 years old and extending to 30s or mid-30s (Hoang et al., 2016; Pinto Pereira & Power, 2017; USDHHS, 2018). We focused on 18 to mid-30s participants because of early adulthood PA implications on mid-life health and to extend ART tests beyond the 18-to-24-year-old demographic. We performed a multi-group analysis to compare younger (18-24 years old; *n* = 177) and older participants (25-35 years old; *n* = 98); the two groups did not differ (χ2diff = 57.86, dfdiff = 49, *p* = .18). We also ran a multi-group analysis for participants living with the parent advisor (*n* = 144) versus not (*n* = 131); the two groups did not differ (χ2diff = 49.91, dfdiff = 49, *p* = .44).

2About 62% of participants reported the advice was received within the past month and over 80% of the sample received advice within the past two months. We reran the model with only participants who reported advice within the past month (*N =* 171). Of the 28 statistically significant paths found with the full sample, four became non-significant (relationship satisfaction to efficacy, receptiveness to advice quality, feasibility to impactPA, absence of limitation to impactPA), and one path became marginally significant (efficacy to advice quality).

3 For the sake of brevity, we do not report these statistics, but they are available from the first author upon request. We deemed the one significant interaction due to chance. It was between absence of limitation and obligation on facilitation of coping (β = -.14, *p* =.01).

4 We compared each statistically significant path against other significant paths for that outcome using Chi-Square difference tests. For each outcome, the strongest associations were: positive facework for advice quality, efficacy for implementation intention, positive facework for coping (marginally significant), and no difference between the three positive associations for ImpactPA.

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Table 1

Descriptive Statistics and Zero-Order Correlations

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | Correlations | | | | | | | | | | | | | | | |
|  |  | *M(SD)* | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Sex | --- | ---- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Age | 24.11(5.01) | -.13\* | ---- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | PSex | --- | .10† | -.01 | ---- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | HowLong | 1.62(.93) | -.05 | .06 | .04 | ---- |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | RelSat | 5.24(1.40) | -.09 | .07 | -.09 | -.02 | *.94* |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Expertise | 3.24(1.08) | -.03 | -.02 | -.22\*\*\* | -.04 | .30\*\*\* | *.86* |  |  |  |  |  |  |  |  |  |  |
| 7 | Receptive | 3.07(1.15) | -.03 | -.05 | -.04 | -.08 | .33\*\*\* | .45\*\*\* | *.90* |  |  |  |  |  |  |  |  |  |
| 8 | Efficacy | 3.76(.91) | .00 | .08 | -.04 | -.05 | .31\*\*\* | .38\*\*\* | .41\*\*\* | *.84* |  |  |  |  |  |  |  |  |
| 9 | Feasible | 4.27(.68) | .03 | -.02 | .02 | .04 | .30\*\*\* | .16\*\* | .13\* | .33\*\*\* | .*74* |  |  |  |  |  |  |  |
| 10 | AbsLim | 3.86(.95) | .00 | -.03 | -.06 | .07 | .12\* | -.05 | -.05 | .09 | .26\*\*\* | .*80* |  |  |  |  |  |  |
| 11 | NegFace | 3.64(.97) | -.04 | .13\* | -.11† | .08 | .45\*\*\* | .40\*\*\* | .43\*\*\* | .57\*\*\* | .33\*\*\* | .10† | .*86* |  |  |  |  |  |
| 12 | PosFace | 3.49(.90) | -.12† | .10† | -.12\* | .03 | .58\*\*\* | .50\*\*\* | .52\*\*\* | .62\*\*\* | .36\*\*\* | .07 | .80\*\*\* | .*91* |  |  |  |  |
| 13 | Oblig | 3.11(.97) | -.12† | -.06 | .03 | -.04 | .09 | .20\*\*\* | .18\*\* | .21\*\*\* | .09 | -.14\* | .06 | .16\*\* | *.81* |  |  |  |
| 14 | AdvQual | 3.86(.98) | -.02 | .10† | .01 | .10† | .58\*\*\* | .40\*\*\* | .50\*\*\* | .60\*\*\* | .38\*\*\* | .08 | .72\*\*\* | .79\*\*\* | .16\*\* | .*86* |  |  |
| 15 | Coping | 3.34(.98) | -.05 | .04 | -.01 | .02 | .38\*\*\* | .30\*\*\* | .44\*\*\* | .39\*\*\* | .29\*\*\* | -.01 | .46\*\*\* | .57\*\*\* | .20\*\*\* | .56\*\*\* | .*89* |  |
| 16 | Intent | 3.87(.92) | -.01 | .00 | -.05 | .01 | .37\*\*\* | .34\*\*\* | .47\*\*\* | .60\*\*\* | .36\*\*\* | .05 | .54\*\*\* | .59\*\*\* | .37\*\*\* | .61\*\*\* | .57\*\*\* | .*90* |
| 17 | ImpactPA | 5.79(3.07) | -.13\* | .00 | -.12† | -.01 | .25\*\*\* | .37\*\*\* | .47\*\*\* | .38\*\*\* | .24\*\*\* | -.05 | .36\*\*\* | .46\*\*\* | .22\*\*\* | .52\*\*\* | .40\*\*\* | .44\*\*\* |

*Note.* Cronbach’s alphas are displayed at diagonal of the table. Sex (1 = male, 2 = female). PSex = parent sex (1 = father/stepfather, 2 = mother/stepmother); HowLong = time since the advice was given (1 = in the past month, 2 = 1-2 months ago, 3 = 3-6 months ago, 4 = 6 or more months ago); RelSat = relationship satisfaction; Receptive = receptiveness; Feasible = feasibility; AbsLimit = absence of limitations; NegFace = negative facework; PosFace = positive facework; Oblig = Obligation; AdvQual = advice quality; Coping = facilitation of coping; Intent = intention to implement; ImpactPA = impact on PA. \**p <* .05, \*\**p* < .001.

Table 2

Path Model Results

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Predictor Variables | | |  | Endogenous Variables | | | |
|  | RelSat | Expertise | Receptive | *R2* | AdvQual | Coping | Intent | ImpactPA |
| Sex | -- | -- | -- | -- | .15 (.10) *.06* | .00 (.13) *.00* | .03 (.09) *.01* | -.85† (.46) *-.10* |
| Age | -- | -- | -- | -- | .01 (.01) *.02* | 00 (.01) *.01* | -.01 (.01) *-.06* | -.01 (.03) *-.02* |
| Parent sex | -- | -- | -- | -- | .19\*\* (.07) *.09* | .08 (.10) *.04* | -.02 (.08) -*.01* | -.45 (.35) -*.07* |
| HowLong | -- | -- | -- | -- | .09\*\* (.04) *.09* | .03 (.05) *.03* | .02 (.04) *.02* | .05 (.16) *.02* |
| RelSat | -- | -- | -- | -- | .13\*\*\* (04) *.19* | .05 (.05) *.08* | .04 (.03) *.07* | -.09 (.15) -*.04* |
| Expertise | -- | -- | -- | -- | -.02 (.04) -*.02* | -.01 (.06) -*.01* | -.02 (.05) -*.02* | .24 (.20) *.08* |
| Receptive | .17\*\* (.05) *.20* | .41\*\*\* (.06) *.39* | -- | .24 | .09\*\* (.04) *.11* | .18\*\* (.06) *.21* | .15\*\*\* (.05) *.19* | .78\*\*\* (.16) *.29* |
| Efficacy | .11\* (.05) *.17* | .18\*\* (.06) *.21* | .22\*\* (.07) *.27* | .24 | .16\*\* (.05) *.15* | .03 (.08) *.02* | .33\*\*\* (.09) *.33* | .33 (.22) *.10* |
| Feasibility | .14\*\*\* (.04) *.28* | .05 (.05) *.08* | .01 (.04) *.01* | .10 | .09† (.05) *.06* | .16 (.10) *.11* | .17 (.12) *.12* | .65\*\* (.25) *.14* |
| AbsLimit | .12\* (.05) *.17* | -.05 (.06) *-.06* | -.06 (.07) *-.08* | .03 | -.01 (.03) *-.01* | -.06 (.05) *-.06* | -.03 (.04) *-.03* | -.29\* (.14) *-.09* |
| NegFace | .22\*\*\* (.04) *.31* | .18\*\* (.06) *.20* | .21\*\*\* (.06) *.24* | .32 | .18\* (.07) *.18* | -.02 (.10) *-.02* | .09 (.09) *.10* | -.19 (.29) -*.06* |
| PosFace | .27 \*\*\* (.04) *.42* | .20\*\*\* (.05) *.24* | .22\*\*\* (.05) *.28* | .51 | .43\*\*\* (.08) *.39* | .43\*\*\* (.12) *.39* | .16† (.09) *.15* | .74\* (.35) *.21* |
| *R2* | -- | -- |  | -- | .72 | .37 | .49 | .34 |

*Note.* Table includes: unstandardized coefficients (standard errors) and *standardized coefficients*. See Table 1 for abbreviations. Sex (1 = male, 2 = female). PSex (1 = father/stepfather, 2 = mother/stepmother).

† *p* < .10, \**p* < .05, \*\**p* < .01, \*\*\**p* <.001.

Table 3

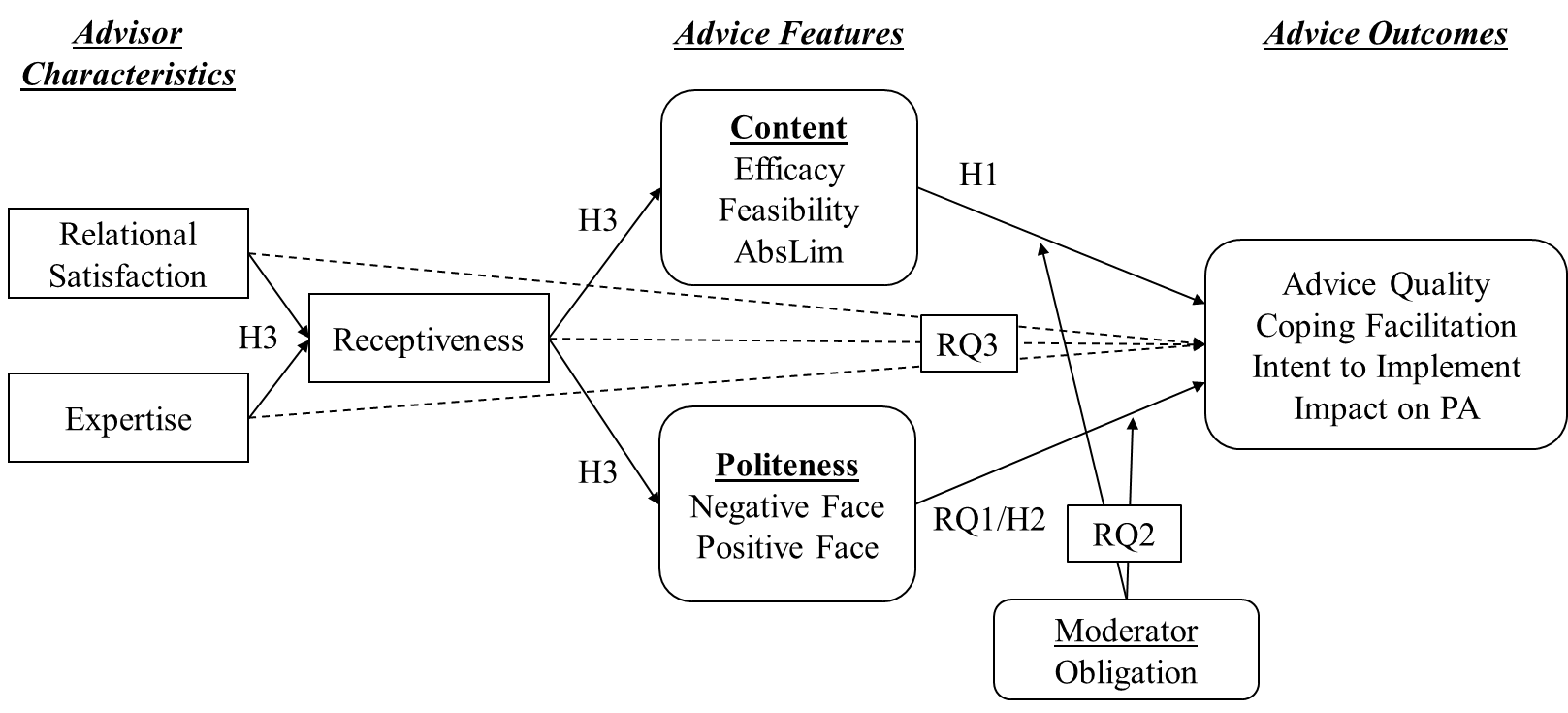
Qualitative Supplemental Analysis Themes and Examples

|  |  |  |
| --- | --- | --- |
| **Theme** | **High/Low** | **Examples** |
| **Efficacy:**  Whether recipients felt there was a problem to solve | *Low Efficacy:*  Health/behavior was not problematic therefore advice was not needed | “I've already been working out without them knowing. So I felt I didn't need the advice being given.” -*Female, 25, #74*  “I'm a BBW [Big Beautiful Woman] model, and I'm completely ok with that” -*Female, 21, #124*  “I already do enough for my health.” -*Female, 22, #155* |
|  | *High Efficacy:*  Recognized and acknowledged problem | “I knew that I had issues with the way I ran but I did not know what it was exactly that I needed to change so getting someone else’s opinion really helped” -*Female, 18, #20*  “I took her advice because I want to look my best and be healthy and happy” -*Female, 30, #274*  “I took my father’s advice because it was very motivating” -*Female, 23, #32* |
| **Efficacy:**  Recipient need for independence | *Low Efficacy:*  Need for independence led to inefficacious appraisals | “I feel I have to learn from my own mistakes and it would be more valid if I tried it” -*Female, 19, #9*  “I am capable of making my own decisions and am content with my body at the moment” -*Female, 21, #245* |
| **Efficacy:** Informational value of advice | *Low Efficacy:*  Directive without giving new information or being tailored to the recipient’s situation | “It is something I already know and have been telling myself” -*Female, 19, #235*  “You need to start working out like I do. You need to get back to your pre-baby shape.” -*Female, 22, #194*  “You need to make more of an effort to eat healthy and exercise more to get healthy” -*Female, 18, #281*  “I don't have enough time to run.” -*Female, 34, #112* |
|  | *High Efficacy:*  Informational support specific to the recipient’s problem | “My dad gave me advice on how I should exercise different parts of my body and not only to focus on one area. I was only training one part of my body but he told me how important it is to work out every muscle” -*Male, 18, #260*  “Working out to lose the weight after my pregnancy. Eat lots of fruit. Substitute fruit [instead of] a cookie or some cake.” -*Female, 20, #35*  “My mother gave me advice on how to get more exercise in with my children in tow. She gave me advice on activities like walking and aerobics also gyms with child care.” -*Female, 26, #278* |
| **Positive facework:**  Whether advice insults, judges, or shamed the recipient | *Low positive facework:*  Advice contained insults, judgments, and/or shamed the recipient | *Insults*  “Kim Kardashian butt, maybe you should walk to work today.” -*Female, 20, #243*  “You need to lose weight fatty.” -*Male, 34, #135*  *Judgment*  "Sweetie, you're getting...Well sort of chubby, no? Maybe you should exercise and stop eating so much junk food.” -*Female, 20, #51*  “If you did some sit ups to burn the fat on your tummy you'd be perfect.” -*Female, 27, #101*  “You're getting a little chubby. You should start jogging again. And squat too to get rid of your cellulite." -*Female, 18, #187*  *Shaming*  “Don't you think you'd lose more weight and feel better if you got off your ass and did some work in the yard” -*Male, 31, #209*  “You'd be so pretty if you were thin…I just don't wanna see you end up alone because you don't take care of yourself.” -*Female, 21, #124*  “[Lose weight so that] I don’t have to be embarrassed when I talk to my friends about you” -*Female, 22, #178* |
|  | *High positive facework:*  Advice did not contain insults, judgments, or shaming | *Bald-on-record*  “You need to start walking more and riding your bike.” -*Female, 21, #72*  “Do more pushups” -*Female, 30, #96*  "Your body consists of different muscles and each muscle should be exercised. Do not focus only on one muscle" -*Female, 26, #260*  “Exercise so it [the participant’s fatty liver] gets better” -*Female, 18, #38*  *Uncommon: Explicit statements of love, affection, or overt approval*  “I love you, and I want you to be happy. Don't forget to take care of yourself.” -*Female, 26, #111*  “Never give up; when you think you can't handle it remember you know you can” -*Female, 23, #32* |

*Note.* After each quote, we include the participant sex, age, and randomly-assigned identification number.

Figure 1

Hypothesized Model for Recipient Perceptions of Advice



Note. Covariates and error terms not shown.