The Influence of Seeker Gaze Direction on Advisor Advice Giving

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Abstract

Grounded in signaling theory, this research employs three sequentially progressive experiments, conducted with university students and working employees as participants, to investigate the impact of advice seekers' gaze direction on advisors' willingness to provide advice. The findings indicate: (1) When advice seekers exhibit direct gaze, it enhances advisors' willingness to offer advice, with advisors' perceived role expectations mediating this relationship. (2) When advisors possess high rejection sensitivity, seekers' gaze direction significantly influences advice-giving willingness; this effect weakens or disappears when advisors have low rejection sensitivity; additionally, rejection sensitivity moderates the mediating role of perceived role expectations.

Full Text

The Influence of Advice-Seeker' s Gaze Direction on Advisor' s Advice-Giving

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Abstract

Drawing on signaling theory, this research employed three sequential experiments to investigate how an advice-seeker' s gaze direction influences an advisor' s willingness to provide advice, using both university students and working employees as participants. The findings revealed that: (1) When the advice-seeker maintained direct gaze, it enhanced the advisor' s willingness to offer

advice, with perceived role expectation serving as a mediator in this relationship. (2) The effect of gaze direction on advice-giving intention was significant when the advisor' s rejection sensitivity was high; this effect weakened or disappeared when rejection sensitivity was low. Additionally, rejection sensitivity moderated the mediating effect of role expectation perception.

Keywords: gaze direction; advice-giving; perceived role expectation; rejection sensitivity; signaling theory

1. Introduction

As the ancient proverb states, "When three people walk together, one can surely find a teacher among them." Advice from others often provides valuable insights that lead to positive outcomes (Sniezek, Schrah, & Dalal, 2010). In daily life, many decisions are not made in isolation. Whether choosing what to purchase, maintaining health, managing organizations, or solving complex problems, people frequently seek advice from others to facilitate their decision-making. Consequently, understanding how to effectively seek advice and how to encourage others to actively provide advice has become an important and worthwhile topic of investigation. Advice-giving is fundamentally a persuasive process. Particularly in sensitive situations or when dealing with inappropriate individuals, advisors first gather contextual information and carefully weigh various factors before deciding whether to proactively offer advice. When advisors anticipate that their suggestions will likely be rejected, their motivation to provide advice diminishes significantly (Milliken, Morrison, & Hewlin, 2010).

Facial information often reveals an individual' s thoughts and emotions, influencing social behavior (Michniewicz & Vandello, 2014; Wang, Wang, Han, Liu, & Zhang, 2018). Gaze direction represents a crucial dimension of facial information, which can be categorized as either direct or averted. As a form of nonverbal communication, gaze direction conveys implicit messages. Direct gaze typically signals an individual' s active engagement in social interaction and elicits more responsive behavior, whereas averted gaze implies disinterest or attentional diversion, hindering emotional expression and social information transmission while negatively affecting others' prosocial behavior (Bjornsdottir & Rule, 2017). Within the advice-giving framework, the seeker' s gaze direction serves as a signal from which advisors can extract cues to infer the seeker' s attitudes, personality traits, and other characteristics, subsequently determining whether to offer assistance. Since advice-giving is essentially a prosocial behavior, we hypothesize and will test whether direct gaze cues from the seeker may enhance the advisor' s willingness to provide advice.

Furthermore, we will explore the mediating role of the advisor' s perceived role expectation in this relationship, as well as the moderating role of the advisor' s trait rejection sensitivity.

1.1 Advice and Advice-Giving

Advice constitutes a specific recommendation about what a decision-maker should do and when, typically provided to individuals experiencing decision-making difficulties (Goldsmith & Fitch, 2010). Research on advice involves at least two roles: the advice-seeker—who faces decision-making challenges and solicits others' opinions—and the advisor—who formulates decisions or alternative solutions for the decision-maker and communicates these recommendations. As a valuable resource, advice not only provides decision-makers with new perspectives on problems and delivers useful information (Gino & Schweitzer, 2008), but also supplies the socio-emotional support needed for decision-making while directly influencing the decision-maker' s behavior (Vardaman, Amis, Dyson, Wright, & Randolph, 2012). The value of these resources also creates a sense of obligation for recipients to reciprocate the advisor' s assistance (Cropanzano & Mitchell, 2005).

In recent years, advice-taking research has garnered widespread attention and become a hot topic in behavioral decision-making research (Sun, Chen, & Duan, 2017). Advice-giving, however, represents an emerging and underexplored direction in this field (Chentsova-Dutton & Vaughn, 2012; Gino, Shang, & Croson, 2009). When individuals attempt to exert interpersonal influence through advice, they typically expect to affect others' opinions or behaviors (Cialdini & Goldstein, 2004), as this confers professional status and prestige upon them (Peluso, Bonezzi, Angelis, & Rucker, 2017). If individuals perceive a low likelihood of their advice being accepted, they become less willing to offer suggestions (Bonaccio & Dalal, 2007). Moreover, advice-giving is closely related to whether the decision-maker actively solicits help. Explicitly requested advice is often perceived as cooperative and beneficial, whereas unsolicited advice is frequently viewed as intrusive and inappropriate (Deelstra et al., 2003). Decision-makers are often dissatisfied with others' spontaneous social support, particularly when they feel capable of solving problems themselves. In such cases, advice becomes more of a challenge (Tost, Gino, & Larrick, 2012) that can damage self-esteem (Reinhardt, Boerner, & Horowitz, 2006).

1.2 Seeker' s Gaze Direction and Advice-Giving

Recognizing the wealth of information conveyed by faces is crucial for human communication and survival (Bjornsdottir & Rule, 2017; Zhang, Zhou, & Wang, 2018). Individuals process facial information almost instinctively and automatically, without requiring active allocation of attentional resources (Sato & Kawahara, 2015). As a variable dimension of facial information, gaze direction serves as an important signal in human social interaction. Since the eyes frequently convey information relevant to the observer, the brain selectively prioritizes their processing (Emery, 2000; Haxby, Hoffman, & Gobbini, 2000). Humans can distinguish between different gaze directions from the newborn period (Farroni, Csibra, Simion, & Johnson, 2002). In visual search tasks, direct gaze is detected more readily by individuals, and when a central face in an experiment

displays direct gaze, participants' reaction times to peripheral targets increase (Senju & Hasegawa, 2005).

According to signaling theory (Connelly, Certo, Ireland, & Reutzel, 2011), in situations of information asymmetry, signal receivers actively extract relevant information provided by signal senders to better understand their preferences and inform their own decision-making (Spence, 2002). Before deciding whether to offer advice, advisors actively search for various signals emitted by seekers and form motivational judgments about them, which subsequently influence their advice-giving intentions and behaviors. As a core feature of the face, the eyes provide substantial nonverbal information in social perception (Ristic & Kingstone, 2005). Compared to averted gaze, direct gaze signals friendly and intimate behavioral intentions, from which receivers perceive warmth (Kleinke, 1986). This expressive pathway plays a key role in social information transmission and generates important effects in social and organizational contexts, such as hiring decisions, information sharing, resource allocation, and cooperation (Glikson, Cheshin, & Kleef, 2018). When interacting with strangers, people evaluate others through gaze cues, perceiving individuals who make direct eye contact as more trustworthy and attractive, which promotes further social interaction (Mason, Tatkow, & Macrae, 2005).

Over the past decade, the "eye effects" phenomenon has attracted psychologists' interest: presenting participants with images of eyes looking directly at them or eye-like pictures changes many behaviors. For instance, participants become more generous, more inclined to cooperate with others, and exhibit more altruistic behavior (Burnham & Hare, 2007; Ekström, 2012; Manesi, van Lange, & Pollet, 2015). In contrast, signals of averted gaze (such as from a seeker) often elicit negative evaluations from others, which may affect the relationship between advisor and seeker (Carnevale, Pruitt, & Carrington, 1982; Casciaro & Lobo, 2008). Furthermore, based on principles of reciprocity and social exchange, advisors also expect returns from those they help—people are more willing to assist those who may benefit them in the future (Carnevale et al., 1982). When seekers convey direct gaze signals while soliciting advice, advisors feel respected and trusted, perceiving a greater likelihood of reciprocation. Simultaneously, when advisors receive signals conveying equality, they tend to identify with the other party and offer assistance. Conversely, averted gaze prevents advisors from ensuring they will be treated fairly in the future, prevents them from perceiving the seeker' s expectation of their advice-giving behavior, and leads them to believe that cooperation will not benefit them or may even harm their interests, making them less willing to engage in cooperative behavior. Therefore, we hypothesize:

H1: Compared to advice-seekers with averted gaze, direct gaze from seekers makes others more willing to provide advice.

1.3 The Mediating Role of Advisor' s Role Expectation Perception

According to signaling theory, signal receivers evaluate the importance of signals based on their own cognitive judgments and develop unique interpretations of their meaning (Branzei, Ursacki-Bryant, Vertinsky, & Zhang, 2010). People can utilize gaze signals from others to perceive faces and recognize emotions, and can also learn about others' attentional focus, behavioral intentions, and even knowledge and beliefs based on gaze direction (Kleinke, 1986). When advice-seekers send direct gaze signals, advisors perceive expectations from these signals. Direct gaze easily makes people feel that the other person is paying attention to them (Pfattheicher & Keller, 2015). When individuals form expectations based on their perception of certain situations, those situations subsequently tend to develop in ways that conform to those expectations (Eden, 1984; Eden et al., 2000). The role expectations that individuals hold for others often exert subtle influences on them. This expectation effect has been validated across various contexts, such as between leaders and employees (Duan, Li, Xu, & Wu, 2017) and between doctors and patients (Lepper, Martin, & Dimatteo, 1995). Expectations from superiors, families, and clients also strengthen employees' self-assessment of their creativity, ultimately affecting their engagement in creative work (Carmeli & Schaubroeck, 2007).

The higher the expectations placed upon an individual, the more they will correspondingly accomplish, as people' s behavior unconsciously conforms to group members' expectations of them (Ajzen, 1991; Eden, 1984; Eden et al., 2000). Here, expectation also implies care and trust. Compared to making decisions for oneself, providing advice to others leads individuals to consider less the attributes of the decision itself and more the dimension of social expectations (Jonas & Frey, 2003; Kray, 2000). During interactions, advice-seekers convey specific signals (such as direct gaze) to express their expectations. Advisors perceive attention or trust from seekers, believe their advice will be valued and accepted, and thus better understand the expectations placed upon them in their role as advisors (Carmeli & Schaubroeck, 2007). Conversely, averted gaze serves as a negative signal from which advisors cannot perceive the seeker' s expectations of their advice-giving behavior and do not receive trust from the other party, naturally diminishing their desire to offer advice. Therefore, we propose the hypothesis:

H2: The advisor' s perceived role expectation mediates the relationship between gaze direction and advice-giving. An advice-seeker' s direct gaze leads the advisor to perceive greater role expectation, thereby promoting their willingness to provide advice.

1.4 The Moderating Role of Advisor' s Rejection Sensitivity

Interpersonal sensitivity and social anxiety are widespread in the population. Rejection sensitivity is a personality trait characterized by hypersensitivity to others' rejection—a tendency toward anxious anticipation, preparatory percep-

tion, and overreaction to rejection (Downey & Feldman, 1996). This tendency significantly impacts individual behavior. When examining personality traits, researchers typically investigate rejection sensitivity as a moderating variable (Liu, Zhao, & Zhang, 2016). Individuals high in rejection sensitivity are particularly attentive and sensitive to rejection signals, which often leads to stronger aversive emotions and reactive aggression (Zhang & Xiao, 2018). Research indicates that people high in rejection sensitivity always anticipate rejection in their interactions with others, exhibiting higher interpersonal avoidance tendencies and lower relationship intimacy (Downey, Mougios, Ayduk, London, & Shoda, 2004). Additionally, those high in rejection sensitivity tend to perceive ambiguous or neutral interpersonal cues as rejection signals, even interpreting them as threatening information directed at themselves. In such cases, this expectation of rejection is more easily activated, and individuals may exhibit strong cognitive and emotional reactions, such as anxiety, anger, or aggressive overreactions (London, Downey, Bonica, & Paltin, 2010). When presented with identical video clips containing ambiguous social information, individuals high in rejection sensitivity are more likely to perceive negative cues and consequently experience stronger feelings of rejection (Romero-Canyas, Downey, Berenson, Ayduk, & Kang, 2010). Moreover, rejection sensitivity not only triggers negative emotions and inappropriate behaviors but also significantly affects individuals' interpretation of and reactions to interpersonal relationships (Breines & Ayduk, 2015).

Although gaze direction can be considered a signal, different signal receivers interpret the same signal differently. Signal effectiveness is partially determined by receiver characteristics; if receivers are insensitive to the signal and fail to recognize it, the signal transmission mechanism cannot operate (Gulati & Higgins, 2003). Certain unique personalities may be more susceptible to signal influence (Highhouse, Thornbury, & Little, 2007). We speculate that advisors high in rejection sensitivity are more likely to attend to averted gaze signals from seekers and interpret them as rejection cues. In such cases, advisors may believe that the other party does not genuinely view them as a helper and does not expect them to provide advice. Conversely, individuals low in rejection sensitivity often ignore gaze signals from seekers or, upon receiving them, interpret potential rejection cues differently without perceiving the negative information conveyed by the signal. Therefore, we propose the following hypotheses:

H3: Rejection sensitivity moderates the relationship between gaze direction and advice-giving intention. When the advisor' s rejection sensitivity is high, the advisor' s willingness to give advice is higher under direct gaze conditions than under averted gaze conditions; when the advisor' s rejection sensitivity is low, the influence of gaze direction on advice-giving is weakened or eliminated.

H4: The mediating effect of the advisor' s perceived role expectation between gaze direction and advice-giving intention is moderated by the advisor's rejection sensitivity. For advisors high in rejection sensitivity, the mediating effect of perceived role expectation on advice-giving remains significant; for advisors low

in rejection sensitivity, this mediating effect is weakened or eliminated.

2.1 Purpose

This experiment tested Hypotheses 1 and 2, exploring whether different gaze directions from advice-seekers affect advisors' willingness to provide advice in advice-seeking contexts and examining the underlying mediating mechanism.

2.2.1 Participants

We recruited 107 participants from a university in eastern China. All participants volunteered for the experiment and received a small gift as compensation. Five participants failed to complete the entire experiment and were excluded, resulting in a final valid sample of 102 participants (39 males; $M = 23.76$, $SD = 4.39$). Using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007), we calculated that based on a medium effect size typical of gaze cue research and a statistical power of 80%, the required sample size was* $N^* = 90$. All three experiments in this study met this standard. The current sample size could detect a minimum effect size of Cohen's $d = 0.56$ with 80% statistical power.

2.2.2 Experimental Design and Procedure

A single-factor between-subjects design was employed, with advice-seekers displaying averted gaze in the control group and direct gaze in the experimental group. Participants were randomly assigned to each group. The experiment was presented using E-prime software. Participants viewed a decision-making scenario on a computer screen simultaneously with a face displaying different gaze directions. They then completed measurements of relevant variables and indicated their willingness to provide advice.

The facial stimulus materials consisted of three volunteer-provided bareheaded photos from university students (two males and one female), taken under identical background and standard lighting conditions showing frontal portraits with neutral facial expressions, no accessories, and no facial hair. All original faces displayed direct gaze. Using Adobe Photoshop, we adjusted the pupil position in each facial image to create rightward-averted gaze versions while keeping all other facial features unchanged. All images were then grayscale-processed, resulting in three pairs of matched facial photographs. The experimental scenario involved career decision-making difficulties:

> "It's graduation season again. Student A is a senior preparing to find a job. He previously applied to two companies. However, A has only received an offer from his second-choice company and is still waiting for a response from his preferred company. But before the preferred company releases its admission results, he must decide whether to sign with or decline the second-choice company. Once he signs with the second-choice company, breaking the contract would

incur a substantial penalty fee. A is now in a dilemma, unsure how to choose, and wants to seek others' advice."

2.2.3 Measurement Instruments

Advice-giving willingness was measured with a single item: "If you were the advisor, would you be willing to provide advice to A?" Responses were rated on a 5-point Likert scale ranging from 1 = "completely unwilling" to 5 = "completely willing."

Perceived role expectation was adapted from the leader creativity expectation scale developed by Farmer, Tierney, and Kung-McIntyre (2003) and Carmeli and Schaubroeck (2007). The scale comprised four items: "A considers me a constructive advisor," "A would be very disappointed if I did not provide advice," "A believes my advice is important to him/her," and "A hopes I can give him/her advice." This scale used a 5-point Likert rating from 1 = "completely disagree" to 5 = "completely agree." Higher scores indicated greater perceived role expectation. The internal consistency coefficient for this scale in the current study was 0.75.

We controlled for facial attractiveness and demographic information such as gender and age. Facial attractiveness was measured with a single-item 7-point Likert scale: "Please rate the attractiveness of the face displayed on the screen," with ratings from 1 (not at all attractive) to 7 (very attractive) (Wen, Gong, Sun, & Li, 2015).

2.3 Results

An independent samples t-test with seeker' s gaze direction as the independent variable and advice-giving as the dependent variable revealed that advice-giving willingness in the direct gaze group (M = 3.59, SD = 0.88) was significantly higher than in the averted gaze group (M = 3.14, SD = 1.14), $t(100)$ = 2.17, p = 0.03, Cohen' s d = 0.43. Additionally, the perceived facial attractiveness of the advice-seeker did not differ significantly between the direct gaze group (M = 3.89, SD = 1.30) and the averted gaze group (M = 4.00, SD = 1.03), $t(100)$ = -0.47, p = 0.64.

We used hierarchical regression analysis to test the mediating role of advisors' perceived role expectation in the relationship between advice-seekers' gaze direction and advisors' advice-giving willingness (Baron & Kenny, 1986). Results showed that advice-seekers' gaze direction grouping had a significant negative effect on advice-giving (B = -0.42, t = -2.17, p = 0.03; 95% CI [-0.81, -0.04]). Gaze direction grouping also had a significant negative effect on role expectation (B = -0.43, t = -2.20, p = 0.03; 95% CI [-0.82, -0.04]). When the seeker' s gaze direction was direct (M = 3.43, SD = 0.69), advisors perceived higher role expectation compared to the averted gaze condition (M = 3.11, SD = 0.77), $t(100)$ = 2.20, p = 0.03, Cohen's d = 0.44. A linear regression analysis with gaze

direction and role expectation perception as independent variables and advice-giving as the dependent variable revealed that the regression coefficient for gaze direction was not significant (B = -0.19, p = 0.26; 95% CI [-0.53, 0.15]), while the regression coefficient for advisors' perceived role expectation was significant (B = 0.54, $p < 0.001$; 95% CI [0.37, 0.71]). In summary, role expectation perception mediated the relationship between advice-seekers' gaze direction and advisors' advice-giving willingness.

To enhance analytical robustness, we also conducted a Bootstrap test of the mediating effect (Hayes, 2013; Model 4). With gender and facial attractiveness as covariates, the mediation test with 5,000 iterations showed that the 95% confidence interval for the indirect effect of role expectation perception did not contain zero (CI = [-0.51, -0.02]), with a standardized indirect effect of -0.24.

Experiment 1 validated Hypotheses 1 and 2. Compared to averted gaze, when advice-seekers displayed direct gaze, advisors demonstrated stronger willingness to provide advice. This prosocial behavior occurred because advisors perceived the seeker' s attention and expectations when observing direct gaze. In contrast, when seekers displayed averted gaze, advisors might perceive that the other party did not genuinely need their advice. The results also indicated that advice-seekers' gaze direction did not significantly affect others' judgments of their facial attractiveness, suggesting that the effect of gaze direction on advice-giving willingness was not mediated by facial attractiveness. Additionally, participants' gender, age, and other irrelevant variables did not affect these findings.

While Experiment 1 examined the main effect of gaze direction on advice-giving and its mediating mechanism, it remains worthwhile to further investigate whether these results differ across individuals with different dispositions and whether the conclusions have limited applicability. Therefore, in Experiment 2, we adopted decision-making tasks more closely related to university students' daily lives to retest the mediating mechanism of gaze direction and explore its boundary conditions.

3.1 Purpose

This experiment aimed to replicate the effect of advice-seekers' gaze direction on advisors' advice-giving willingness while testing Hypothesis 3 by exploring whether advisors' trait rejection sensitivity moderates this effect.

3.2.1 Participants

We recruited 318 university students from a university in eastern China. All participants volunteered for the experiment and received a small gift as compensation. The sample included 155 males with a mean age of 21.74 years (SD = 1.49). Using G*Power, we determined that the actual sample size could detect a minimum effect size of Cohen' s* d* = 0.43 with 80% statistical power.

3.2.2 Pretest

We first administered the Tendency to Expect Rejection Scale (TERS; Rebecca, 2003) to measure participants'trait rejection sensitivity. We selected participants scoring in the top 27% as the high rejection sensitivity group (86 participants, 35 males) and those scoring in the bottom 27% as the low rejection sensitivity group (86 participants, 36 males).

3.2.3 Experimental Design and Procedure

A 2 (gaze direction: direct vs. averted) × 2 (rejection sensitivity: high vs. low) between-subjects design was employed. The experiment was programmed and presented using E-prime, with participants completing tasks on computers.

The experimental scenario was changed from a career decision context to a self-compiled daily academic life situation:

> "Student A will take the CET-6 English exam in one week. He/she has arranged a tight study schedule, using evenings for review since classes occupy daytime hours—at least one hour each night for vocabulary memorization and two hours for practice tests. Student A' s good friend B will need to retake the advanced mathematics exam in one week, but B has a weak math foundation and finds it difficult to pass through last-minute cramming alone. This retake represents B's final opportunity. B hopes someone can spare one to two hours each evening for tutoring, but with final exams approaching, everyone is busy. Student A excels at mathematics, so B has made this request to A. A is unsure how to decide: agreeing might delay his/her own review plan, but refusing might damage their friendship. A is now in a dilemma and wants to seek others' advice."

3.2.4 Measurement Instruments

Rejection sensitivity was measured using the Tendency to Expect Rejection Scale (TERS) developed by Rebecca (2003) in her doctoral dissertation. The scale contains 18 items rated on a 5-point Likert scale, with six reverse-scored items. Representative items include "I am sensitive to rejection,""Being accepted by those around me is very important to me,"and "I am not very concerned about whether others accept or reject me (reverse-scored)." The internal consistency coefficient for this scale in the current experiment was 0.75.

The measurement instruments for advice-giving willingness, perceived role expectation, and the control variable of facial attractiveness were identical to those in Experiment 1. The internal consistency coefficient for the perceived role expectation scale in this experiment was 0.84.

3.3 Results

An independent samples t-test revealed a significant main effect of seeker' s gaze direction on advice-giving willingness. Advisors' willingness to provide advice was significantly greater under direct gaze conditions ($M = 3.46$, $SD = 0.96$) than under averted gaze conditions ($M = 2.60$, $SD = 0.84$), $t(170) = 6.27$, $p < 0.001$, Cohen' s $d = 0.96$, replicating Hypothesis 1.

To further test the moderating effect of advisors' rejection sensitivity, we conducted an ANOVA with advice-giving as the dependent variable, gaze direction and rejection sensitivity level as independent variables, and participants' age, gender, and advisor facial attractiveness as covariates. Results showed a significant main effect of gaze direction ($F(1, 168) = 38.38$, $p < 0.001$, $^2 = 0.19$), a non-significant main effect of rejection sensitivity ($F(1, 168) = 0.65$, $p = 0.42$), and a significant interaction between gaze direction and rejection sensitivity ($F(1, 168) = 5.11$, $p = 0.025$, $^2 = 0.03$).

To examine the effect of gaze direction on advice-giving under different levels of advisors' rejection sensitivity, we conducted simple effects analysis. As shown in [Figure 1: see original paper], under low rejection sensitivity conditions, advice-giving willingness was higher when the advice-seeker displayed direct gaze ($M = 3.34$, $SD = 0.94$) compared to averted gaze ($M = 2.82$, $SD = 0.83$), with a significant difference between gaze direction groups, $t(84) = 2.72$, $p = 0.008$, Cohen' s $d = 0.59$. Under high rejection sensitivity conditions, advice-giving willingness was also higher under direct gaze ($M = 3.58$, $SD = 0.98$) than under averted gaze ($M = 2.37$, $SD = 0.79$), with an even more pronounced difference, $t(84) = 6.30$, $p < 0.001$, Cohen's $d = 1.37$. These results indicate that high rejection sensitivity amplifies the effect of gaze direction on advice-giving willingness, whereas low rejection sensitivity weakens this effect, confirming Hypothesis 3.

[Figure 1: see original paper]

3.4 Discussion

Experiment 2 provided a deeper examination of the relationship between gaze direction and advice-giving willingness. The results replicated Hypotheses 1 and 2, again demonstrating in a laboratory setting that direct gaze positively influences advice-giving intention. Additionally, Experiment 2 found that when advisors' trait rejection sensitivity was high, advice-giving willingness under direct gaze conditions was significantly greater than under averted gaze conditions. When advisors' trait rejection sensitivity was low, the effect of gaze direction on advice-giving was somewhat attenuated.

After establishing the main effect of gaze direction on advice-giving willingness and its mediating and moderating mechanisms, it is important to consider whether these effects hold true in real organizational contexts and whether rejection sensitivity also moderates the mediating effect. Experiment 3 further extended the ecological validity of the previous two studies' results.

4.1 Purpose

Considering that university settings are relatively simple and students are less sensitive to social information, while corporate environments are more socially representative and working employees are more sensitive to subtle social cues such as gaze direction, Experiment 3 selected a workplace decision-making scenario and employed working employees as participants to replicate and validate our hypotheses.

4.2.1 Participants

We recruited 198 full-time employees from enterprises in the Yangtze River Delta region as participants. All participants volunteered for the experiment and received a small gift as compensation. The sample included 88 males with a mean age of 31.20 years ($SD = 5.06$). Using G*Power, we determined that the actual sample size could detect a minimum effect size of Cohen' s* $d^* = 0.40$ with 80% statistical power.

4.2.2 Experimental Design and Procedure

A single-factor between-subjects design (gaze direction: direct vs. averted) was employed. The manipulated faces were presented on questionnaires, and participants completed subsequent variable measurements based on Person A' s face. The experimental procedure was consistent with Experiment 1, with the addition of measuring participants' rejection sensitivity. The scenario was self-developed as follows:

> "A is a colleague in your company. Recently, the company has many project tasks with tight deadlines, and the workload for his/her primary responsibilities is already heavy. However, a superior has temporarily arranged a skills training course and hopes A can attend as a department representative. A feels that his/her skills and knowledge in this area are already well-mastered and does not want to participate in this type of training, and also feels there is no energy to take on more work. On the other hand, he/she does not want to go against the superior' s wishes for fear of conflict. So A is now in a dilemma, unsure how to choose, and wants to seek advice from others."

4.2.3 Measurement Instruments

The measurements for advice-giving and perceived role expectation were identical to Experiment 1. The internal consistency coefficient for role expectation perception in this experiment was 0.67. Rejection sensitivity was measured using the same scale as in Experiment 2, with an internal consistency coefficient of 0.89. Additionally, since previous research has shown that participants' education level may affect individual trait rejection sensitivity, Experiment 3 also measured participants' education level.

4.3 Results

Descriptive statistics are presented in . Advice-giving willingness was significantly correlated with gaze direction (r = -0.22, p = 0.002) and perceived role expectation (r = 0.48, $p < 0.001$). Role expectation perception was significantly correlated with gaze direction (r = -0.66, $p < 0.001$) and rejection sensitivity (r = -0.14, p = 0.049). However, rejection sensitivity was not significantly correlated with advice-giving (p = 0.924). Further independent samples t-tests revealed a significant main effect of seeker' s gaze direction on advice-giving. Advice-giving willingness was significantly higher under direct gaze conditions (M = 2.86, SD = 0.68) than under averted gaze conditions (M = 2.54, SD = 0.77), $t(196)$ = 3.17, p = 0.002, Cohen' s d = 0.45, again confirming Hypothesis 1.

Controlling for irrelevant variables including age, gender, education level, and advice-seeker' s facial attractiveness, we used Bootstrap analysis to test the mediating effect of advisors' perceived role expectation. With 5,000 iterations, the 95% confidence interval for the mediating effect did not contain zero (CI = [-0.80, -0.43]), indicating a significant mediating effect with a magnitude of -0.60. Furthermore, after controlling for the mediating variable of role expectation perception, the effect of the independent variable (gaze direction) on the dependent variable (advice-giving) remained significant, with the interval also not containing zero (CI = [0.01, 0.07]). Therefore, role expectation perception mediated the effect of gaze direction on advice-giving willingness, replicating Hypothesis 2.

To explore the moderating effect of rejection sensitivity, we used Bootstrap analysis (Hayes, 2013; Model 1). With 5,000 iterations, the 95% confidence interval for the moderation effect did not contain zero (CI = [-0.54, -0.02]), F(1, 190) = 4.51, p = 0.03, with an effect size of -0.28, confirming the moderating effect. Further analysis revealed that under high rejection sensitivity conditions, the result did not contain zero (CI = [-0.96, -0.20]), with an effect size of -0.58; whereas under low rejection sensitivity conditions, the result contained zero (CI = [-0.37, 0.33]). This indicates that when advisors have high rejection sensitivity, direct gaze conditions produce relatively higher advice-giving willingness, but under low rejection sensitivity conditions, whether the advice-seeker displays direct or averted gaze makes no significant difference in advice-giving willingness. Hypothesis 3 was thus supported.

We further used Bootstrap analysis to test whether advisors' rejection sensitivity level moderated the mediating effect of their role expectation perception (Hayes, 2013). With advice-giving as the dependent variable, gaze direction as the independent variable, rejection sensitivity as the moderator, advisors' perceived role expectation as the mediator, and participants' age, gender, education level, and facial attractiveness as control variables, the moderated mediation analysis with 5,000 iterations showed that perceived role expectation indeed mediated the interactive effect of gaze direction and rejection sensitivity on advice-giving

willingness (CI = [-0.36, -0.03]), with a mediating effect size of -0.18. Dividing rejection sensitivity into low, medium, and high levels using the mean and mean ± one standard deviation, we found that under high rejection sensitivity conditions, the mediating effect of advisors' perceived role expectation did not contain zero (CI = [-1.10, -0.53]), with a mediating effect of -0.79; under low rejection sensitivity conditions, the mediating effect also did not contain zero (CI = [-0.69, -0.19]), but the effect size was attenuated to -0.43. Hypothesis 4 was supported.

4.4 Discussion

Experiment 3 directly treated rejection sensitivity as a continuous variable, added a test of the moderated mediation effect, and further validated all hypotheses in a real organizational context. After controlling for a series of irrelevant variables, the main and mediating effects remained robust in the organizational setting. Moreover, compared to Experiment 2, Experiment 3 further confirmed the moderating effect of rejection sensitivity. That is, only when advisors have high trait rejection sensitivity does direct gaze from advice-seekers (compared to averted gaze) increase advisors' advice-giving willingness; under low trait rejection sensitivity conditions, the effect of different gaze directions on advice-giving willingness becomes non-significant. Experiment 3 also examined whether the entire study demonstrated a moderated mediation effect, finding that advisors' trait rejection sensitivity significantly moderated the mediating effect of their perceived role expectation.

5.1 Discussion of Research Findings

Faces serve as external cues for inferring help-seekers' mental states and play an important role in helping behavior (Michniewicz & Vandello, 2014; Wang et al., 2018). Through three experiments, we explored the effect of seekers' gaze direction on advice-giving and conducted in-depth analyses of its underlying psychological mechanisms and boundary conditions. The results showed that, compared to averted gaze, direct gaze positively influenced advisors' advice-giving, consistent with the eye effects phenomenon (Zhang & Liu, 2017). Additionally, mediation tests revealed that the increase in advice-giving willingness occurred because direct gaze made advisors perceive greater role expectation, consistent with previous role expectation research and further confirming the guiding effect of expectation perception on role behavior (Dierdorff, Rubin, & Bachrach, 2012). Through the formation of expectation perception, advisors interpret cues from seekers' gaze direction, which subsequently influences their intention to provide advice to others.

Subsequently, to explore how different levels of rejection sensitivity affect the above results, Experiment 2 grouped participants using the rejection sensitivity scale. The results showed that the gaze direction effect was more pronounced in the high rejection sensitivity group. Experiment 3 selected an organizational

context and employed working employees as participants to revalidate the hypotheses. Advice-giving is needed not only in daily life but also particularly important in organizations, prompting scholars to extensively examine how to enhance employees' voice behavior in organizational settings (e.g., Chamberlin, Newton, & LePine, 2017; Duan et al., 2017; Morrison, 2014). Based on this, we attempted to replicate and validate our hypotheses and the effectiveness of our experimental design in a social context. Our findings enhanced the robustness of the research results, expanded the external validity of the study, and provided new, direct experimental evidence for research on antecedents of voice behavior.

The results again supported our hypotheses, showing that under high rejection sensitivity conditions, gaze direction had a significant effect on advice-giving. This aligns with previous research indicating that high rejection sensitivity leads to aggressive, withdrawn, and avoidant behaviors in response to perceived rejection cues (Downey et al., 2004; Gleason, Iida, Shrout, & Bolger, 2008). Individuals high in rejection sensitivity tend to interpret ambiguous signals from others as rejection or threats, leading to more negative interpersonal interactions, more negative evaluations of relationships, and choosing to terminate social relationships (Gleason et al., 2008). Therefore, advisors high in rejection sensitivity believe they will certainly be rejected by seekers, think that seekers do not expect their advice, and consequently develop negative perceptions of seekers and are unwilling to provide them with advice. Conversely, under low rejection sensitivity conditions, advisors tend to provide advice to others regardless of whether the advice-seeker' s gaze direction is direct or averted, because individuals low in rejection sensitivity either ignore averted gaze cues from seekers or interpret rejection signals more mildly. They are more inclined to establish and maintain social relationships through advice-giving, demonstrating greater adaptability and altruism, consistent with research showing that rejection sensitivity is negatively correlated with social adaptation ability (Chow, Au, & Chiu, 2008).

5.2 Research Significance

Previous advice research has primarily focused on factors influencing decision-makers' advice-taking, with minimal investigation of factors affecting advice-giving (Feng & Magen, 2016; Rader, Larrick, & Soll, 2017). The current study approaches the issue from the advisor' s perspective, examining cues displayed by advice-seekers, thereby enriching and expanding the new domain of advice research. Moreover, the advice-giving process is an interpersonal interaction, yet previous advice research has overlooked peripheral and nonverbal cues that may be key factors influencing advisors' reactions (Brooks, Gino, & Schweitzer, 2015). This study incorporates eye gaze information, not only broadening research perspectives on gaze cues but also laying a foundation for subsequent research combining peripheral cues with advice-giving. Simultaneously, the research demonstrates the important role of advisors' individual trait rejection sensitivity in advice-giving, exploring the interactive effect between advisors'

rejection sensitivity and seekers' gaze direction, which offers heuristic value for further research on gaze cues.

This study represents a beneficial attempt to apply classic signaling theory to the advice-giving domain. From the perspective of advisors as signal receivers, we examined how advisors interpret gaze direction signals from seekers, while also considering how receivers' trait rejection sensitivity affects the signal discrimination process, greatly enriching the connotation and application scenarios of signaling theory. Furthermore, the research emphasizes both the seeker' s perspective—how transmitted gaze signals affect advisors' advice-giving—and the advisor' s perspective, focusing on interaction effects during the process, thereby providing a more comprehensive depiction of the advice-giving interpersonal interaction process.

5.3 Limitations and Future Directions

First, the facial information used in this study only considered the single dimension of eye gaze direction, which limits the study' s contributions since gaze conveys relatively simple and rapidly changing information. As the human brain processes both gaze direction and facial expressions very quickly and automatically (Bayliss, Frischen, Fenske, & Tipper, 2007), and cognitive systems spontaneously utilize other peripheral information such as vocal tone and facial expressions when perceiving things (Sato & Kawahara, 2015), future research should explore interactive effects between eye gaze and facial expressions or vocal tone, considering how these variables interact or synergistically influence advice-giving.

Second, although this study developed multiple relatively realistic advice-seeking scenarios, a limitation is that we did not conduct pilot tests to preliminarily examine the validity of the materials. Future research should more rigorously screen and validate experimental materials. Additionally, the manipulation of gaze direction was relatively simple, and the tasks participants completed were relatively straightforward, which differs from the rich diversity of real decision-making contexts. While participants verbally indicated their willingness to provide advice to seekers in the experiments, this does not guarantee they would actually do so in real situations. Future research could design scenarios more closely related to individuals' identities or with higher personal involvement, employ more diverse manipulations of gaze direction, and utilize multiple measures of advice-giving to enhance internal and external validity. Furthermore, future research could investigate how social individuals specifically seek advice from others and deeply explore the psychological impact of advice-giving behavior on advisors themselves (Schaerer, Tost, Huang, Gino, & Larrick, 2018).

In conclusion, compared to averted gaze, advice-seekers' direct gaze direction leads to stronger advice-giving willingness from advisors, with advisors'perceived role expectation mediating this relationship. Additionally, both the relationship

between gaze direction and advice-giving and the mediating role of role expectation perception are moderated by advisors' trait rejection sensitivity. When advisors have high rejection sensitivity, direct gaze conditions produce higher advice-giving willingness and a significant mediating effect; when advisors have low rejection sensitivity, the effect of gaze direction on advice-giving is reduced or eliminated, and the mediating effect of perceived role expectation is also attenuated.

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