# 第一页为封面页

参赛队员姓名: 方鸣洋 Mingyang Fang

中学: 上海市民办万源城协和双语学校

省份: 上海

国家/地区: 中国,南方赛区

指导教师姓名: Zhiyong Yang

指导教师单位: 美国迈阿密大学 (Miami University, Ohio, US) 法默商学院

论文题目: <u>Two Types of Adolescents' Online</u>

<u>Disclosures: The Role of Parental Mediation</u>

<u>Strategies</u>

论文题目 Two Types of Adolescents' Online Disclosures: The Role of Parental Mediation Strategies

作者 方鸣洋 Mingyang Fang

论文摘要 Traditional literature on the privacy calculus theory shows that a tradeoff exists between risks and benefits when determining an individual's information behavior. However, adolescents do not have a full knowledge or appreciate of risks and benefits because of their limited rationality and cognition and they often underestimate risks and overestimate benefits. Therefore, I offer a novel approach to studying the factors that affect adolescent online disclosure from the perspective of parental mediation. In previous research, the findings regarding the relationship between parental mediation and adolescents' online disclosure have been inconsistent. This study explores such inconsistency by categorizing online disclosure into two dimensions—namely self-information disclosure and sharinginformation disclosure, and introducing parent and adolescent gender. Based on a survey of 811 families (father, mother, and an adolescent) in China, this study shows that when a father uses an evaluative mediation strategy with his children, especially with boys (vs. girls), and when a mother uses a restrictive mediation

strategy with her children, especially with girls (vs. boys), the children are more likely to reduce their online self-disclosure. Specifically, children's self-information disclosure is more negatively affected by the father's evaluative mediation and the mother's restrictive mediation when compared with sharing-information disclosure. Theoretical and practical implications of these results are discussed.

关键词 Adolescents, Self-information disclosure, Sharing-information disclosure, Evaluative mediation, Restrictive mediation, Gender

目录

Introduction

Theoretical background

Research model and hypotheses development

Method

Discussion

论文正文:

## INTRODUCTION

Internet prevalence and the development of information technologies have changed people's daily lives—and the social lives of adolescents in particular. According to a Pew research report (Anderson & Jiang, 2018), about 95% of teenagers have access to a smartphone, and 45% of them are online "almost constantly." Many

adolescents view smartphones as an integral part of their lives and feel that they can hardly live without them (Roberts et al., 2014). YouTube, Instagram, and Snapchat are the most popular social media websites among adolescents, as social media has given teenagers the opportunity to be connected virtually. According to Statista, in 2017, 2.48 billion online users used social networking sites, and this number is expected to grow to 3.09 billion by 2021. Growing up in the internet era, adolescents view social media platforms as an inseparable part of daily life, making social media the default solution for improving their social lives (Shapiro & Margolin, 2014).

Social media websites commonly ask users to provide personal information, and encourage users to also post their feelings and experiences. *Online disclosure* refers to the extent to which individuals share personal information with others via online platforms such as social media websites (Collins & Miller, 1994). Online disclosure has been considered a crucial step in developing close relationship with others (Reis & Shaver, 1988). Such disclosure could be particularly important for adolescents, because they are eager to gain peer approval and acceptance and exchanging personal information may be a starting point (Christofides et al., 2011; Rimal & Real, 2005). As social media becomes a new venue for adolescents to interact and make friends, online disclosure may be an important gesture in building good online relationships.

Although social media expands adolescents' social connections and generates interactive opportunities with friends, online disclosure may bring unintended risks and negative consequences to children and adolescents (Forest and Wood, 2012). Some studies have shown that adolescents who disclose more personal information on social media websites are more likely to suffer from cybervictimization, online bullying, or

<sup>&</sup>lt;sup>1</sup> https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/ (Accessed on Feb 24, 2020)

meet a stranger encountered online in person (Wright, 2018; Lenhart et al., 2011; Mesch, 2009).

For fear of these negative consequences, parents make a great effort to reduce adolescents' online disclosures. Given that adolescents' behavior can be influenced by parents, I intend to understand how adolescents' online disclosures are affected by parental mediation strategies.

Adolescents are in the transition period from childhood to adulthood. Although they seek autonomy and independence during this time, they still need wisdom and guidance from parents to adapt to independent living. Parents are important socialization agents for children's growth, particularly in terms of skills, knowledge, and attitudes related to their roles in society (Moore et al., 2002), and parental perspectives can be passed on to their children through this socialization process (Moschis & Churchill, 1978).

Previous scholars have explored the relationship between parental mediation and adolescents' private information. In these studies, parental mediation has often been considered a multidimensional concept and includes restrictive mediation, evaluative mediation, and co-using (Lee & Chae, 2012; Lo Cricchio et al., 2022; Navarro et al., 2013). However, because adolescents pursue independent thinking and behavior, the parental mediation of co-using—defined as parents and children using the internet together for browsing or social media participation—has rarely been used to be explored the effect on adolescents' online disclosure (Shin & Ismail, 2014; Valkenburg et al., 2013). And most of the studies focusing on the influence of restrictive mediation and evaluative mediation on adolescents' online privacy disclosures have reached inconsistent results (Lo Cricchio et al., 2022). The majority have shown a negative

correlation between parental mediation (including restrictive and evaluative mediation) and adolescents' online disclosures (Liu et al., 2013; Liu et al., 2016; Lwin et al., 2008). However, some studies have shown that restrictive and evaluative mediation strategies do not affect adolescents' online disclosures (Shin et al., 2012), and others have shown that both mediation strategies can positively affect adolescents' online disclosures (Shin & Ismail, 2014; Shin & Kang, 2016). According to Lo Cricchio et al. (2022), a possible reason for such inconsistent findings is that some contextual factorsadolescents' pursuit of independence, parental knowledge, technical ability and perceived privacy risks—have not been taken into account. In this study, the sociologic concept of gender is used as a contextual factor to explain these inconsistent findings, because the theory of gender-role learning indicates that parents' different gender roles and characteristics may have different effects on the attitude and behavioral learning of children, depending on whether the gender matches between children and parents (van der Vleuten et al., 2018). Finally, according to information that is disclosed online, there are two specific types: self-information disclosure and sharing-information disclosure (Chen et al., 2016; Taddicken, 2014). Previous studies have not distinguished between these two types when exploring the relationship between parental mediation and adolescents' privacy disclosures. However, Taddicken (2014) has suggested that selfinformation disclosure and sharing-information disclosure are distinct and have different formation mechanisms that need to be studied separately.

Therefore, this study investigates the influence of parental mediation on the two types of online disclosure of adolescents, as well as the moderating effect of adolescents'

gender. This study offers several important theoretical and practical contributions. First, previous studies on information privacy disclosure have mainly focused on the individual perspectives of adults, who fully weigh benefits and costs before making privacy decisions (Dinev et al. 2015; Smith et al. 2011). However, adolescents often underestimate risks and overestimate benefits due to the limited rationality and cognition (Jia et al., 2015), which may be affected by social factors. Hence, the current study extends the information privacy disclosure literature by emphasizing the influence of parental mediation as a social factor on adolescents' online disclosures. Second, I not only explore the influence of restrictive and evaluative mediation on the two types of disclosure (self-information and sharing-information disclosure), I also compare the father and mother's different mediation effects upon disclosure. Previous studies have investigated only one parent and have not compared the influence of both parents at the same time (Chen et al., 2016; Lee & Chae, 2012). Third, in this study, the influence of different mediation strategies adopted by the father and mother, as well as the moderating effect of adolescents' gender, are examined, which responds to a call for contextual reasons for previous the studies' inconsistencies. Finally, adolescents often do not understand the extreme importance of privacy. Thus, although parental education and mediation play a very significant role, most studies have shown that such mediation is often ineffective or even counterproductive (Shin et al., 2012; Shin & Kang, 2016). The current study can provide advice on how parents should correctly use mediation strategies to reduce their children's online disclosure on the internet, especially in regards to their children's gender.

The structure of this study is as follows First, I review the existing research literature. The hypotheses and conceptual model of this study are then proposed. The research methodology, including data collection and variable measurements, are presented. I then conduct the hypotheses tests and display the research results. Finally, the theoretical and practical contributions, as well as research limitations and future research directions, are discussed.

# THEORETICAL BACKGROUND

# Parental Influence and Children's Behavioral Changes

Extant research on family influence suggests that parents, as children's primary socialization agents, play an important role in shaping children's learning (Moschis, 1985). The process of socialization generally starts in childhood, which makes parents the first and probably the most influential socialization agents (Moore et al., 2002). During this process, children tend to learn social norms, attitudes, and motives from their parents (Moschis & Churchill, 1978). As one result of learning in the socialization process, children may change their attitudes or behaviors in response to parental influence. Another possible outcome of parental influence might be that children do not actually acquire their parents' attitudes, but rather address their concerns by simply behaving as expected. In this paper, I will examine the processes of these two possible outcomes, respectively.

Parental influence research suggests that information, beliefs, and resources can be transferred from one generation to the next through an internalization process (Moore et al., 2002; Yang & Laroche, 2011). This type of influence could last for three or even four generations within the family (Schiffman & Kanuk, 2004) and include different aspects such as brand attitudes and decision preferences (Hsieh et al. 2006; Schindler et al., 2014). In the context of online disclosure, the internalization process occurs when parents influence children's disclosure through privacy concerns. This process often takes place when parents pass down values they have endorsed or modeled to their children (Grusec & Goodnow, 1994; Lekes et al. 2011; Yang & Laroche, 2011). Consistent with this argument, recent studies have indicated that parents' risk attitudes can also be conveyed to their children (Anger & Heineck, 2010; Dohmen et al. 2012). For example, De Paola (2013) showed that students whose parents are entrepreneurs (i.e., risk-bearing parents) are more likely to have a higher risk-taking propensity than those whose parents are employed as public sector employees (i.e., risk averse parents). Similarly, Necker and Voskort (2014) reported that parents and their children have similar levels of willingness to take risks in their respective occupations. In fact, parents' self-reported risk attitudes are highly correlated with their children's attitudes in a variety of domains, including financial risk and career risk (Dohmen et al., 2012).

Different from the internalization process in which parents' attitudes or beliefs impact children's attitudes or beliefs, parental influence could also generate a compliance process in which parental perception directly impacts children's behavior.

Prior research has shown that parents might directly impact children's behaviors and can include information searches, purchasing patterns, and brand loyalty (Cotte & Wood, 2004). In our study context, this compliance process reflects the pattern in which parental online-privacy concerns directly influence children's online disclosure without changing children's privacy concerns. The induced behavior is adopted by children not because they believe in its content, but because by conforming, they may expect to gain rewards and/or avoid punishments (Kelmen, 1958; Yang, 2008). For example, children may obey parents' requests regarding eating heathy food, such as fruits and vegetables, to earn some game time. Another example is that children comply with their parents' request of verbally expressing gratitude to others, and thus are not accused by parents of showing bad manners (Halberstadt et al., 2016). As such, in the online context, children may adopt advocated behaviors by agreeing with parents' perspectives regardless of their own. However, this does not mean children accept their parents' attitudes or perspectives wholeheartedly (Kochanska, 2002; Yang, 2008).

Similar concepts have been discussed by previous researchers to describe these two types of processes. Peterson et al. (1985) suggested that when children outwardly conform to their parents without an internalized commitment to their attitudes, it shows children's external conformity to their parents' requests. When children have integrated parents' attitudes into their own and behave accordingly, it indicates internal conformity.

### **Context of Learning: Parental Mediation Strategies**

Mediation strategies provide a learning environment that facilitates parents'

influence on their children. These strategies were first examined in the context of children's television viewing (Nathanson, 1999; 2001). When different programs are publicly televised, children might be exposed to content that parents do not want them to see. Therefore, parents often employ mediation strategies to protect children from being influenced by undesirable content or help children understand a particular message. For example, parents may watch television with children in order to express opinions on the programs and reduce potential negative influences. Parents may also set up rules by themselves or with their children regarding programs they are allowed to watch. By implementing these strategies, children are more likely to learn about their parents' concerns regarding television programs. Later, adapting restrictive, evaluative mediation strategies from Nathanson (2001) and co-using mediation strategy from Lee et al. (2007), Navarro et al. (2013) extended these three strategies into the online context. Table 1 summarizes these three typical strategies—restrictive, evaluative, and co-using parental mediation—in the context of children's online activities. These strategies of restrictive and evaluative mediation are the focus of this study.

Restrictive parental mediation allows parents to set expectations and rules (e.g., which websites to visit, how much time spent on internet browsing) for their child to follow (Lee, 2012). Using such expectations and rules, parents often employ reward or punishment mechanisms to drive their child to adopt advocated behaviors (Gershoff, 2002). For example, parents may allow their child some extra game time if she effectively follows the rules; otherwise, parents may reduce her normal amount of playtime. The child may learn parental attitudes and concerns through such reinforcement. Consistent with this argument, Buijzen and Valkenburg (2003) showed that children's comprehension about their parents' attitudes toward materialistic and consumption-inducing advertising is likely to be enhanced through restrictive parental

mediation. Through a time restriction, parents' attitudes toward the television program are emphasized. Reiterated parental perspectives are more likely to draw children's attention and make them realize parental concerns regarding the content.

**Table 1. Context of Learning: Parental Mediation Strategies** 

	Definition	How Strategies Facilitates	<b>Empirical Examples</b>
		Learning	
Restrictive	A strategy that	Provides parental	Setting time limits for
Parental	monitors and limits	expectations and rules	children's internet
Mediation	children's online	regarding websites or	surfing, and checking
	activities.	software children can use.	websites and software
		Children may learn =	that children install.
		parents' attitudes and	) (()
		concerns via	•.(/)
		reinforcement.	
Evaluative	A strategy that	Strategies reflect parental	Co-creating certain
Parental	encourages parents	support for children's	rules regarding which
Mediation	and children to set	online behaviors and give	websites and how
	up guiding rules	children respect. Children	much time children
	together for	may learn parents'	spend on them.
	children's online	attitudes and concerns	
	activities.	from children's interactive	
	, (	discussions and	
		communications in	
		creating rules.	w · · · · · · · ·
Co-using	A strategy that	Parents directly monitor	Joining the same
Parental	encourages parents	children's online behavior.	social network site,
Mediation	and children to use	Children may reduce self-	and sharing the same
	the Internet together	disclosure simply because	platform information.
	without discussion.	of parents' presence.	

Evaluative parental mediation offers an opportunity for parents and children to engage in interactive communication. The process involves children's active participation in making rules to guide their behavior and motivates both parents and children to interact regarding the necessity of such rules (Warren et al., 2002; Yang, 2008). Research on evaluative parental mediation in television viewing, for example, has shown that children whose parents use evaluative mediation are more likely to adopt their parents' skeptical attitude toward television content (Austin, 1993). This is because such parents have actively provided input to help children understand the content (Austin, 1993;

Austin et al., 2000), including content that promotes materialistic values and product purchases (Buijzen & Valkenburg, 2003; 2005). Through parent-child interactions, children better understand parents' concerns regarding television content.

#### **Online Disclosure**

Internet popularity has created a highly interconnected environment. Users can disclose or share various information anytime to other users regardless of whether they know them (Bevan et al., 2015; Christofides et al., 2011). When registering or using some network platforms for the first time, such as Facebook and SNS, users will be encouraged or even forced to disclose personal privacy information and create personal data, such as name, gender, age, and contact information for convenient communication (Christofides et al., 2012). Many studies have shown that adolescents are more likely than adults to disclose information online (Van Gool et al., 2015). It has been shown that through information sharing, adolescents build and display their self-image and then form and maintain their social circle (Taddicken, 2014; Van Gool et al., 2015). However, as adolescents do not have fully mature social cognitive abilities—and information on the internet is persistent, replicable, scalable, searchable, and shareable (Taddicken, 2014)—online disclosures can result in unnecessary or even dire consequences such as privacy invasion, reputation damage and cyberbullying (Liu et al., 2019; Van Ouytsel et al., 2014). Therefore, it is important to explore the influencing factors of adolescents' online disclosures.

Traditional literature on the privacy calculus theory (Dinev et al., 2015; Smith et al., 2011) shows that a tradeoff exists between risks and benefits when determining an

individual's information behavior (Smith et al., 2011). If the benefits outweigh the risks, the individual will disclose information. Previous research indicates that the privacy calculus is not only a direct antecedent to online disclosure behavior, but also a basis for integrating other theories on information privacy (Li, 2012). Thus, one can deduce that adolescents' online disclosure is determined by both benefits and risks. For the perceived benefits, previous research has shown that perceived self-enhancement and perceived socialization are two kinds of benefits. The former refers to using social media to present adolescents themselves, impress others, and enhance their self-image and popularity (Hawk et al., 2019), while the latter refers to addressing social relationships through online interactions (e.g., making new friends, sustaining friendships) (Chen et al., 2016). The two kinds of benefits encourage adolescents to disclose on social media. In this study, I treat the two kinds of benefits as the control variables for adolescents' online disclosure. In the case of perceived risks, cyberbullying is a general risk for adolescents (Chen et al., 2016), which could affect their online disclosure behavior. Therefore, I include the experience of cyberbullying as a control variable to show the influence of risk factors on adolescents' online disclosure.

When determining an individual's information behavior, he or she will make a tradeoff between risks and benefits, especially adults (Smith et al., 2011). However, Oliva (2004) pointed out that adolescents do not have a full knowledge or appreciate of risks and benefits because of their limited rationality and cognition (Jia et al., 2015), and they often underestimate risks and overestimate benefits.

Considering that adolescents are more likely to be affected by the external environment (Story et al., 2002), prior research on adolescents' online disclosure has been explored from the aspects of individual characteristics and external environment characteristics. Online adolescent users who are more likely to disclose information tend to be male, over age 15 (Xie & Kang, 2015), more trusting of others (Chang & Heo, 2014; Joinson et al., 2010), and have larger circles of friends who use the internet more often (Madge et al., 2009; Manago et al., 2012). In addition, adding new, unfamiliar friends to a social network can increase adolescents' online disclosures because of a desire to be popular (Christofides et al., 2011). Moreover, Xie and Kang (2015) suggested that the number of social network applications used by adolescents is also related to information disclosure, because as the number of applications increases, the greater the level of disclosure. At the same time, adolescents with high privacy concerns can reduce their private disclosure behavior by increasing network management (Chen et al., 2016). In previous studies, adolescents' online disclosure has been mostly explored as a single dimension. However, recent studies have pointed out that adolescents' online disclosures are diverse and include self-information such as names and photographs, as well as the sharing of news, other people's opinions or information, and so forth (Chen et al., 2016; Taddicken, 2014). Types of information disclosure have different characteristics (for example, self-information disclosure is more sensitive and controllable than sharing-information disclosure), and adolescents might have different considerations when making disclosures; that is, the formation mechanisms of the types adolescents' information disclosure behaviors are different (Taddicken, 2014). Therefore, to better understand adolescents' online disclosure and reduce the possibility of adverse consequences, I offer a novel approach to studying the factors that affect adolescent online disclosure from the perspective of external environment, and I conduct a more detailed exploration of two different types of online disclosure (self-information and sharing-information disclosure) from the perspective of parental mediation strategies.

# RESEARCH MODEL AND HYPOTHESES DEVELOPMENT

# The Effect of Parental Mediation on Adolescents' Online Disclosures

Parents play different roles in their social lives and family lives (Philip et al., 2019). Previous studies have indicated that a father, as a male, often shows strong, persuasive, and logical characteristics and pays more attention to power, achievement, and self-guidance. A mother, as a female, is considered emotional, gentle, and sensitive, and pays more attention to love, family, and security (Drake et al., 2017; Schwartz & Rubel, 2005). According to the gender-role theory, mothers may be more suitable for the nursing occupation, for example, which requires sensitivity and meticulousness, while fathers are more suitable for the occupation of workers, which requires strong physical strength (van der Vleuten et al., 2018). Similarly, in the family, the mother takes on more housework and child care, and the father takes more responsibility for the family's economic resources (Hess et al., 2014; Lee, 2000). Although both parents may play an important role in their children's socialization (Updegraff et al., 2009), fathers and

mothers have distinct personality characteristics, values, and behavior norms that have corresponding influence on children's personalities, values, and behavior norms (van der Vleuten et al., 2018). Thus, when it comes to monitoring their children's online disclosure, fathers and mothers should use different mediation strategies to maximize their effectiveness.

For a father, evaluative mediation is more effective than restrictive mediation, for two reasons. First, as a male, a father is often regarded as rational, logical, and persuasive (Philip et al., 2019), and he tends to solve problems in an organized and logical way (McKinney & Stearns, 2021; Szkody et al., 2020). Compared with restrictive mediation, discussion-based evaluative mediation emphasizes the internalization process. That is, this mediation focuses more on changing the children's attitude rather than directly changing their behavior (Kang et al., 2021), which is more consistent with a fathers' personality characteristics and can play to gender-role advantages to achieve effectiveness in reducing children's online disclosure. Second, as the father often pursues power, self-achievement, and usually financial support for the family (Hess et al., 2014; Laghi et al., 2012), he is often less involved in the care and education of their children than the mother (Tam, 2009; Updegraff et al., 2009). Under these conditions, if a father engages in rule-based restrictive mediation with their children, it may be more likely to trigger rebelliousness (Lo Cricchio et al., 2022), resulting in the opposite effect. However, if the father uses evaluative mediation, he can develop more communicative and educational opportunities with his children, as well as strengthen their mutual understanding (Lee & Chae, 2012; Shin & Kang, 2016). In this way, children can also better understand the problems of online disclosure and effectively reduce self-information and sharing-information disclosure.

In the two types of online disclosure, self-information disclosure is more related to the real-world information of adolescents and their families (Taddicken, 2014), and such disclosure may even feature images of the adolescents in their daily lives (Van Gool et al., 2015). If this information is used maliciously, it could have a great impact on adolescents' real lives (Liu et al., 2019). Therefore, parents should pay greater attention to adolescents' online self-information disclosure (Shin & Kang, 2016). However, the content of sharing-information disclosure mainly come from others such as news and hearsay—not the children themselves (Chen et al., 2016; Taddicken, 2014). As a result, parents may pay less attention to their children's sharing-information disclosure than to self-information disclosure. In addition, children's sharinginformation disclosure mainly repeats information from others, which cannot be controlled. As a result, it is difficult for parents to make rules or even discuss the information shared by children (Kang et al., 2021). Given these two reasons, compared with children's sharing-information disclosure, parents may pay more attention to children's self-information disclosure in the mediation strategy, and parental mediation may be more effective in reducing children's self-information disclosure. Therefore, a father's evaluation mediation may be more effective in reducing children's selfinformation disclosure than in reducing sharing-information disclosure.

Accordingly, the following hypotheses are proposed:

**H**<sub>1a</sub>: A father's evaluative mediation is negatively related to his children's self-information disclosure.

**H**<sub>1b</sub>: A father's evaluative mediation is negatively related to his children's sharinginformation disclosure.

**H**<sub>1c</sub>: The negative relationship between a father's evaluative mediation and children's self-information disclosure is stronger than that of his children's sharing-information disclosure.

For a mother, restrictive mediation is more effective than evaluative mediation. Unlike the father, the mother is emotional and gentle (Philip et al., 2019). She undertakes more care and education of the children and has more contact time (Tam, 2009; Updegraff et al., 2009). Considering the communication between a mother and children in daily life, which can strengthen trust (Laghi et al., 2012; Liu et al., 2015), when she makes rules for her children's online disclosure, the rules are more likely to be accepted, thus reducing the children's disclosure. Moreover, restrictive mediation emphasizes direct compliance based on daily communication and trust, which matches the mother's family role. Therefore, even if internet access rules are set for children, it is easier for a mother to find appropriate ways for the children to understand and accept such rules (Laghi et al., 2012; Tam, 2009)—i.e., to exert the effectiveness of restrictive mediation to reduce children's online disclosure, including self-information and sharing-information disclosure. Conversely, evaluative mediation focuses on discussion and communication and does not explicitly set boundaries for children's online behavior (Lo Cricchio et al., 2022; Shin & Ismail, 2014). A mother's gender role, caring kindly for the family (Laghi et al., 2012), can further reduce children's risk perception of online information disclosure. Therefore, if a mother uses evaluative mediation, the effect of it on her children's online disclosure may be reduced. In other words, when a mother conducts a restrictive mediation strategy, it can be more effective in reducing her children's online disclosure, including self-information and sharing-information disclosure.

Similarly, due to the importance of self-information and the ease of regulating self-information disclosure (Chen et al., 2016; Taddicken, 2014), it is easier for a mother to make rules and supervise their children's online self-information disclosure rather than their sharing-information disclosure. Therefore, a mother's restrictive mediation may also have a greater impact on their children's self-information disclosure than their sharing-information disclosure.

Accordingly, the following hypotheses are proposed:

H<sub>2a</sub>: A mother's restrictive mediation is negatively related to her children's self-information disclosure.

 $\mathbf{H}_{2\mathbf{b}}$ : A mother's restrictive mediation is negatively related to her children's sharing-information disclosure.

H<sub>2c</sub>: The negative relationship between a mother's restrictive mediation and her children's self-information disclosure is stronger than that of her children's sharing-information disclosure.

## The Moderating Role of Children's Gender

The influence of parental mediation on children's online disclosure is not only related to parents' gender but also by the children's gender. The process of socialization indicates that children begin to learn specific behavior gender norms and values from their social environment beginning in childhood (van der Vleuten et al., 2018), and family is one of the most important sources of gender-role socialization (Hitlin, 2006). Hence, parents often communicate appropriate gender-category behaviors to promote the socialization of children's gender roles (Updegraff et al., 2009). According to the theory of gender-role learning, boys and girls are more likely to learn appropriate gender-role behaviors from parents of the same gender (van der Vleuten et al., 2018). Similarly, the process of socialization also indicates that children are particularly susceptible to same-gender parents due to both active learning from and imitating parents of the same gender, as well as societal encouragement (Updegraff et al., 2009; van der Vleuten et al., 2018). Therefore, this study proposes that the influence of parental mediation strategies on children's online disclosure may be moderated by children's gender.

First, boys are more likely than girls to be affected by their father's values and to imitate his behavior (van der Vleuten et al., 2018). Thus, when the father uses an online mediation strategy, boys are more likely to be affected than girls. Specifically, when the father discusses and analyzes online content and issues with boys—i.e, using evaluative mediation rather than restrictive mediation—not only are the boys more likely to feel respected (Liu et al., 2013), they are also more likely to gain independence and responsibility (Hess et al., 2014; Montgomery et al., 2017), which is consistent with the

social gender role of males (Philip et al., 2019). Thus, a father's evaluative mediation is more accepted by their sons, and it can help reduce boys' self-information and sharing-information disclosure. However, girls are brought up to be dependent and loving in the family, and a father's evaluative mediation based on discussing and promoting children's independence does not match the girls' gender roles (Hess et al., 2014; van der Vleuten et al., 2018). Moreover, discussion-based evaluative mediation under non-gender role learning is more likely to annoy girls (Stearns & McKinney, 2020), which reduces the effectiveness of a father's evaluative mediation. Thus, boys' online disclosure is more likely to be affected by the father's evaluative mediation than girls' disclosure. Specifically, since self-information is more important and it is easier for parents to supervise the content of children's self-information disclosure, boys' self-information disclosure is more likely to be negatively affected by the father's evaluative mediation than sharing-information disclosure.

Accordingly, the following hypotheses are proposed:

H<sub>3a</sub>: A father's evaluative mediation is more negatively related to boys' self-information disclosure than that of girls' self-information.

H<sub>3b</sub>: A father's evaluative mediation is more negatively related to boys' sharinginformation disclosure than that of girls' self-information.

H<sub>3c</sub>: For boys, the negative relationship between a father's evaluative mediation and his children's self-information disclosure is more significant than that of his children's sharing-information disclosure.

Second, similarly, girls are more likely to be affected by their mother's values and to imitate her behavior (van der Vleuten et al., 2018). Thus, when a mother uses an online mediation strategy, girls are more likely to be affected than boys. A mother has female social gender-role characteristics, such as concern and love (Laghi et al., 2012; Philip et al., 2019), which are role characteristics expected by society in the socialization of girls. As a result, the girls are more likely to approve of their mothers beliefs and behavior (Hess et al., 2014; van der Vleuten et al., 2018). When a mother uses restrictive mediation rather than evaluative mediation, she clarifies rules and boundaries for her children's online behavior (Lo Cricchio et al., 2022; Shin & Kang, 2016). Girls who identify with and learn from their mother's behavior (van der Vleuten et al., 2018), and who are raised to be dependent on their family from an early age (Hess et al., 2014), may be more willing to follow such rules and reduce their amount of online information disclosure. However, boys are more likely to rebel when exposed to rules because they have been raised to be independent (Lo Cricchio et al., 2022; Stearns & McKinney, 2020). When the mother uses rule-based restrictive mediation, she expects the children to directly follow these rules and make behavioral responses (Lee, 2012). However, boys are raised to be independent from an early age and they need to internalize the process (McKinney & Stearns, 2021)—i.e., changing attitudes to changing behaviors—which does not match the mother's restrictive mediation. As a result, boys may be less likely to understand and follow their mother's rules, resulting in a less effective use of restrictive mediation by their mother. Therefore, a mother's restrictive mediation may be more effective in reducing girls' online information disclosure, especially girls' self-information disclosure.

Accordingly, the following hypotheses are proposed:

H<sub>4a</sub>: A mother's restrictive mediation is more negatively related to girls' self-information disclosure than that of boys' self-information.

**H**4ь: A mother's restrictive mediation is more negatively related to girls' sharinginformation disclosure than that of boys' self-information.

H<sub>4c</sub>: For girls, the negative relationship between the mother's restrictive mediation and the children's self-information disclosure is more significant than that of the children's sharing-information disclosure.

# **Control Variables**

Based on the literature review, I included the perceived benefits and risks of adolescents' online disclosure as control variables. For the perceived benefits, I include adolescents' perceived self-enhancement and perceived socialization benefits as control variables because the two variables are seen as facilitators of online disclosure. For the perceived risks, I included the experience of cyberbullying as a control variable, which is seen as an inhibitor of online disclosure. I also treated both father's restrictive mediation and mother's evaluative mediation as control variables. In addition, I added the adolescent's age, father's age, mother's age, and household income as control variables for online disclosure.

Figure 1 depicts the theoretical model.

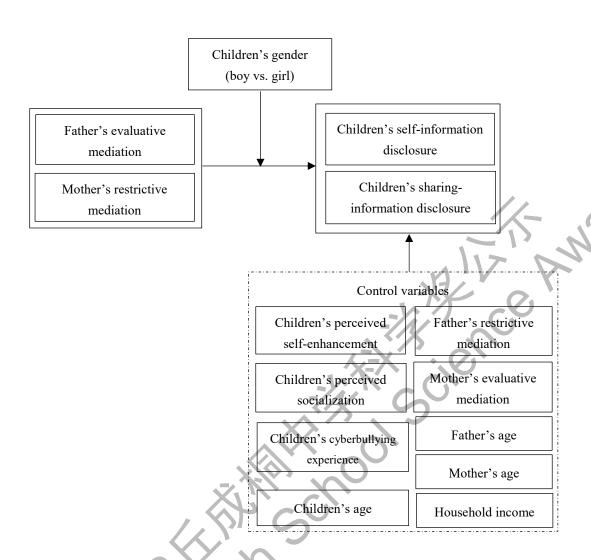


Figure 1. The Conceptual Model.

# **METHOD**

# Sample and Procedure

I conducted this study at the beginning of 2022. The data were collected from a sample consisting of family triads (i.e., a father, a mother, and a teenage child) in a junior-senior high school in Eastern China. I chose these students because as adolescents, they are not as mature as adults, and thus they may disclose information

that could lead to serious consequences (Liu et al., 2019). The samples from junior-senior high school fit our research more closely.

Prior to the main data collection process, I conducted a pilot study with 10 randomly selected junior-senior high school students in China. The initial measurement scales in this study were primarily obtained through a literature search. After these scales were validated and adjusted, I finalized the questionnaire after trials based on small samples. The survey was conducted in China, therefore, I used the backtranslation method. This method, in which a survey is first translated from English to Chinese and then back again to English, ensures the idiomatic equivalence of the Chinese and English versions (Spielmann & Brislin, 1977).

In the main study, I contacted several junior-senior high schools in Eastern China to explain the purpose of this study and then submitted a formal application to each school principal for approval. One junior-senior high school showed an interest in my survey and permitted my application. In return for participation, I promised a copy of the research results to this school.

In this junior-senior high school, 1300 students in 20 classes composed of different grades were randomly selected to participate in the study. I distributed 1300 sets of questionnaires to the teachers, who handed out the packages to their students in class. Matched father-mother-child questionnaires were designed and distributed to reduce the impact of the common method bias due to self-reported data from a single source. Thus, each package contained three envelopes: a survey for the student, one for the student's mother, and one for the student's father. The students filled in the

questionnaire in class, and it was collected on site by the teachers. The students took the other two surveys with prepaid return envelopes home to their parents. After completing the survey, the fathers and mothers sealed the envelopes and mailed them back to the author. A single identification number was assigned to the three questionnaires in each package in order to ensure the responses were from the same family. The sections regarding parental mediation, including both restrictive mediation and evaluative mediation, and age and household income, were completed by both father and mother, respectively. The sections on online disclosure, perceived self-enhancement and perceived socialization, cyberbullying experience, gender, and age were filled out by the students. One thousand and three-hundred sets of questionnaires were sent to students in the school. A total of 811 family survey packages were returned with complete responses.

In order to check for nonresponse bias,  $\overline{I}$  compared the responding families to the nonresponding families (i.e., packages containing only the student's responses). The results of Pearson chi-square tests indicated no significant differences in the demographic factors across these two groups (all p values > 0.1).

#### Measures

Independent variables. Parental mediation comprises different forms of management including restrictive mediation, evaluative mediation, and co-using (Livingstone & Helsper 2008). This study focused on the father's evaluative mediation

and the mother's constrictive mediation. These two variables were filled in by the student's father and mother respectively and both were measured by three items on a seven-point scale (father's evaluative mediation—e.g., "My child and I have agreed-upon rules about the websites that my child can or cannot visit"; and mother's restrictive mediation—e.g., "I check and supervise the software that my child installs on the computer";1 = Strongly disagree; 7 = Strongly agree) adapted from previous research (Navarro et al., 2013).

Dependent variables. Using the scale by Chen et al. (2016), students completed their online disclosure and measured the two dimensions of actual information disclosure in the past 30 days: the self-information disclosure consisted of seven items (e.g., "posting pictures/videos of myself"; 1 = None; 7 = Daily or almost daily); and the sharing-information disclosure consisted of four items (e.g., "sharing materials that I believe are interesting"; 1 = None; 7 = Daily or almost daily).

*Moderator*. Children's gender was the moderator in this study. A dummy variable was used and coded as 1 or 0 to indicate boy or girl.

Control variables. Following prior research (Liu et al., 2013), the age of the child was incorporated as a control variable, as this factor may be related to information disclosure, and it was self-reported by the students who took part in the survey. Moreover, the father's restrictive mediation and the mother's evaluative mediation were also controlled (Shin & Kang, 2016). These two variables were filled in by the father and mother respectively and both were measured by three items on a seven-point scale (father's restrictive mediation—e.g., "I check and supervise the software that my child

installs on the computer"; and mother's evaluative mediation—e.g., "My child and I have agreed rules about the websites that my child can or cannot visit"; 1 = Strongly disagree; 7 = Strongly agree) (Navarro et al., 2013). In addition, I also controlled a child's perceived self-enhancement (e.g., "The postings I made on social media allow me to communicate to others something about me";1 = Strongly disagree; 7 = Strongly agree), perceived socialization (e.g., "I use the postings to communicate to others my social status";1 = Strongly disagree; 7 = Strongly agree) and eyberbullying experience (e.g., "People have said negative things (like rumors or name calling) about how I look, act, or dress online";1 = Strongly disagree; 7 = Strongly agree), the age of the father and the mother (e.g., "Your age is: 1 = below 30 years old; 2 = 31-40 years old; 3 = 41-50 years old; 4 = 51-60 years old; 5 = above 60 years old"), and household income (e.g., "Your annual household income is: 1 = Under \$20,000; 2 = \$20,001-40,000; 3 = \$40,001-60,000; 4 = \$60,001-80,000; 5 = \$80,001-100,000; 6 = \$100,001-120,000; 7 = \$120,001-140,000; 8 = \$140,001-160,000; 9 = Above \$160,001").

**Table 2. Measurement Items** 

7710011 10115
hildren's self-information disclosure (1 = None; 7 = Daily or almost daily)
Chen et al., 2016)
buring the past 30 days, how often did you do the following activities?
eID 1 Posting my locations.
eID 2 Posting pictures/videos of myself.
eID 3 Posting pictures/videos of my activities.
eID 4 Posting pictures of the food I ate.
eID 5 Posting pictures of me dining in a restaurant.
eID 6 Posting pictures of my travel.
eID 7 Posting pictures of my purchases.
<b>Children's sharing-information disclosure</b> (1 = None; 7 = Daily or almost daily)
(Chen et al., 2016)

During t	he past 30 days, how often did you do the following activities?	
ShID 1	Sharing news with others.	
ShID 2	Sharing materials that I believe are interesting.	
ShID 3	Sharing materials that provide tips to make life easier.	
ShID 4	Sharing materials that can benefit our work/study.	
The fath	ner's/mother's restrictive mediation (1 = Strongly Disagree; 7 = Strongly Agree)	
(Navarro	o et al., 2013)	15
REM 1	I check the web pages that my child visits on the internet.	*O.
REM 2	I check and supervise the software that my child installs on the computer.	
REM 3	I have installed software or filters that keep my child from going to specific websites or	
	downloading specific information.	
The fath	ner's/mother's evaluative mediation (1 = Strongly Disagree; 7 = Strongly Agree)	
(Navarro	o et al., 2013)	
EVM 1	My child and I have agreed-upon rules about the amount of time s/he can spend online.	
EVM 2	My child and I have agreed-upon rules about the websites that my child can or cannot	
	visit.	
EVM 3	My child and I have agreed-upon rules about the personal information that my child can	
	or cannot share online.	
Childre	n's perceived self-enhancement (1 = Strongly Disagree; 7 = Strongly Agree)	
(VanMe	ter et al., 2015)	
PSE1	The postings I made on social media allow me to communicate to others something	
	about me	
PSE2	I believe other people can form an impression of me based on the postings I made on	
	social media	
PSE3	I choose the postings that are good representations of who I am	
PSE4	I feel that the postings help me show others who I am or who I'd like to be.	
PSE5	I feel that the postings I made on social media can enhance my image	
	n's perceived socialization (1 = Strongly Disagree; 7 = Strongly Agree)	
(VanMe	ter et al., 2015)	
PSO1	I use the postings to communicate to others my social status	
PSO2	Through the postings on social media I can connect with other people	
PSO3	The postings I made on social media help me associate with certain groups of people	
PSO4	I communicate my success through the postings I put up on social media	
Childre	n's cyberbullying experience (1 = Strongly Disagree; 7 = Strongly Agree)	
(Tynes e	t al., 2010)	
CBU1	People have said negative things (like rumors or name calling) about how I look, act,	
ik	or dress online	
CBU2	People have said mean or rude things about the way that I talk (write) online	
CBU3	People have posted mean or rude things about me on the Internet	
CBU4	I have been harassed or bothered online for no apparent reason	
CBU5	I have been harassed or bothered online because of something that happened at school	
CBU6	I have been embarrassed or humiliated online	
CBU7	I have been bullied online	

# Results

Assessment of measures. According to the suggestion by Fornell and Larcker (1981), I assessed the reliability of items by evaluating the item loadings on their corresponding construct and internal consistency. The internal consistency for all constructs is satisfactory in that all values of Cronbach's alpha were equal to or greater than 0.70 (see Table 3). The convergent and discriminant validity of the multi-item scales were obtained via CFA analysis. If the average variance extracted (AVE) values exceed 0.50, convergent validity is adequate (Fornell & Larcker, 1981). As shown in Table 3, the results established convergent validity of these factors with most of AVE scores above 0.50, with the exception of the convergent validity value of children's perceived socialization, which was at 0.46. Fornell and Larcker (1981) also indicated that if the AVE score is between 0.4–0.5, but the composite reliability of the construct is higher than 0.6, the convergent validity is still adequate. In this study, the composite reliability of children's perceived socialization was 0.70, and thus its convergent validity was also adequate. Discriminant validity is established if the AVE score is higher than the squared correlation coefficients between factors (Fornell & Larcker, 1981). Results in Table 3 indicated that this criterion was met across all pairs of factors.

Table 3. Means, Standard Deviations, Correlations, and AVE

Variables	Mean	S	Cronbach's α	α 1	2	8	4	5	9	7		9 1	10 1	11	12	13	14
1. Father's evaluative mediation	5.10	1.75	0.82	(0.82)													
2. Mother's restrictive mediation	3.59	1.96	0.78	0.13	(0.80)												
3. Children's gender	0.50	0.50		-0.04	0.03												
4. Children's self-information disclosure	2.25	1.26	0.85	*80.0-	-0.08*	* -0.12**	(0.85)										
5. Children's sharing-information disclosure	3.30	1.67	0.83	-0.08*	-0.07*	* -0.02	2 0.45**	(0.83)									
6. Children's perceived self- enhancement	3.89	1.33	0.77	-0.05	-0.02	-0.07	7 0.21**	0.13**	(0.65)								
7. Children's perceived socialization	3.48	1.39	0.70	-0.03	-0.01	1 0.10**	* 0.24**	0.22**	0.48**	(0.46)							
8. Children's cyberbullying experience	1.86	1.01	0.82	-0.05	0.05	5 0.05	5 0.13**	0.10**	0.14**	0.18**	(0.80)						
9. Children's age	16.45	1.13	•	-0.06	*80.0-	* 0.13**	* -0.02	-0.11*	0.05	0.05	-0.01	•					
10. Father's restrictive mediation	3.63	1.92	0.77	0.39**	0.38**	* -0.01	1 0.00	-0.02	-0.04	0.02	-0.04	0.11**	(0.78)				
11. Mother's evaluative mediation	5.08	1.80	0.83	0.33**	0.40**	* -0.06	5 -0.03	-0.03	10.0	0.01	-0.06	*60.0-	0.18**	(0.78)			
12. Father's age	2.82	0.52	•	-0.01	0.00	0.02	5 -0.06	-0.01	-0.01	-0.04	-0.05	0.24**	-0.04	0.01	•		
13. Mother's age	2.63	0.55	1	-0.02	-0.03	3 0.06	5 -0.05	-0.01	0.02	-0.02	0.04	0.25**	-0.06	-0.05	0.58**	•	
14. Household income	4.11	1.99	,	0.05	-0.01	1 0.02	5 0.06	-0.03	-0.02	0.03	0.03	-0.06	-0.04	0.01	-0.05	-0.11**	
Note: N=811. AVE scores are on the diagonal in parentheses.	the diagor.	nal in par	entheses.	.* p < 0.01,	< 0.01, * p < 0.05.	.55							NOI	,85			

Note: N=811. AVE scores are on the diagonal in parentheses.  $^{**}\,p < 0.01,\,^*\,p < 0.05.$ 

Tests of hypotheses. I used the structural equation model (SEM) to examine the hypotheses with Mplus 7 (Muthén & Muthén, 2012). The SEM analysis is suitable for this study since it examines all effects simultaneously to accurately model the causal mechanism (Williams and Anderson, 1994). All variables, with the exception of the categorical ones, were standardized. The model fit the data at an accepted level ( $\chi^2$  = 2216.14, df = 970;  $\chi^2/df$  = 2.28; RMSEA = 0.042; CFI = 0.90; TLI = 0.88).

 $H_{1a}$  and  $H_{1b}$  state that a father's evaluative mediation is negatively related to his children's self-information disclosure and sharing-information disclosure, respectively. Consistent with  $H_{1a}$  and  $H_{1b}$ , results showed that a father's evaluative mediation has a negative effect on his children's self-information disclosure ( $\beta$  = -0.09, p < 0.05) and sharing-information disclosure ( $\beta$  = -0.08, p < 0.05), respectively. Moreover, the negative effect on the children's self-information disclosure ( $\beta$  = -0.09, p < 0.05) is stronger than that of the children's sharing-information disclosure ( $\beta$  = -0.08, p < 0.05). The result supports  $H_{1c}$ .

 $H_{2a}$  and  $H_{2b}$  state that a mother's restrictive mediation is negatively related to her children's self-information disclosure and sharing-information disclosure, respectively. Consistent with  $H_{2a}$  and  $H_{2b}$ , results showed that a mother's restrictive mediation has a negative effect on her children's self-information disclosure ( $\beta$  = -0.11, p < 0.01) and sharing-information disclosure ( $\beta$  = -0.09, p < 0.05), respectively. Moreover, the negative effect on children's self-information disclosure ( $\beta$  = -0.11, p < 0.01) is stronger than that of the children's sharing-information disclosure ( $\beta$  = -0.09, p < 0.05). The result supports  $H_{2c}$ .

 $H_{3a}$  and  $H_{3b}$  describe the moderating roles of the children's gender on the effect of the father's evaluative mediation on his children's self-information disclosure and sharing-information disclosure, respectively. Considering that gender is a category variable, to understand the nature of the interaction effects, a bootstrapping of 5,000 iterations revealed that the effect of a father's evaluative mediation on his children's self-information disclosure was negative (-0.16) and significant (p < 0.01) with boys, but not significant (-0.03; p=n.s.) with girls. These results lend support for  $H_{3a}$ . Consistent with  $H_{3b}$ , the effect of a father's evaluative mediation on children's sharing-information disclosure was negative (-0.12) and significant (p < 0.05) with boys, but not significant (-0.01; p = n.s.) with girls. Moreover, the negative effect on the boys' self-information disclosure (p = 0.16, p < 0.01) is stronger than that of sharing-information disclosure (p = 0.12, p < 0.05). The result supports  $H_{3c}$ . These results are presented in Table 4.

 $\mathbf{H_{4a}}$  and  $\mathbf{H_{4b}}$  describe the moderating roles of the children's gender in the effect of a mother's restrictive mediation on children's self-information disclosure and sharing-information disclosure, respectively. Considering that gender is a category variable, to understand the nature of the interaction effects, a bootstrapping of 5,000 iterations revealed that the effect of a mother's restrictive mediation on children's self-information disclosure was negative (-0.16) and significant (p < 0.01) with girls, but not significant (-0.04; p=n.s.) with boys. These results lend support for  $\mathbf{H_{4a}}$ . Consistent with  $\mathbf{H_{4b}}$ , the effect of a mother's restrictive mediation on her children's sharing-information disclosure was negative (-0.13) and significant (p < 0.05) with girls, but

not significant (-0.04; p=n.s.) with boys. Moreover, the negative effect on the girls' self-information disclosure ( $\beta$  = -0.16, p < 0.01) is stronger than that of the girls' sharing-information disclosure ( $\beta$  = -0.13, p < 0.05). The result supports  $\mathbf{H}_{4c}$ . These results are presented in Table 4.

Table 4. Results of the Moderating Effects of Children's Gender

Independent variables	Independent variables	Moderato	r variable
Parental mediation	Children's information disclosure	- Children	's gender
	λ.	Effect (boy)	Effect (girl)
Father's evaluative	Children's self-information disclosure	-0.16**	-0.03
mediation	Children's sharing-information disclosure	-0.12*	-0.01
Mother's restrictive	Children's self-information disclosure	-0.04	-0.16**
mediation	Children's sharing-information disclosure	-0.04	-0.13*

Note. N=811. \*p<0.05, \*\*p<0.01

#### DISCUSSION

Two main findings are proven in this study. First, the effectiveness of parental mediation on adolescents' online disclosure is affected by parental gender. Specifically, when a father uses evaluative mediation and a mother uses restrictive mediation, children offer less self-information and sharing-information disclosure on the internet, especially in regards to self-information disclosure. Second, the effectiveness of parental evaluative mediation and restrictiveness mediation on adolescents' online

disclosure can be moderated by children's gender. Specifically, children's self-information disclosure and sharing-information disclosure, especially self-information disclosure, are more effectively reduced when parents and children are of the same gender; that is, when a father uses evaluative mediation for boys (vs. girls) and a mother uses restrictive mediation for girls (vs. boys).

# **Theoretical and Practical Implications**

First, this study extends the research on information privacy disclosure. Traditional privacy calculus literature has mostly focused on adults and their individual perspectives. The literature has assumed that individuals are rational and thoughtful, and make privacy decisions based on full consideration of the benefits and costs (or risks) of online disclosure (Dinev et al., 2015; Smith et al., 2011). However, adolescents often underestimate risks and overestimate benefits due to the limited rationality and cognition (Jia et al., 2015), and their privacy decisions can and are easily influenced by social factors such as the presence, attitudes, and behaviors of parents and peers. Given that parents are important socialization agents in adolescents growth, this study highlights the influence of parental mediation on information privacy disclosure of adolescents and extends previous research on information privacy disclosure by exploring the socialization influencing factors of adolescents' online disclosure (i.e., parental behavior).

Second, the results of this study enrich the research on the impact of parental mediation on adolescents' online disclosures. In previous studies, scholars investigated the father or the mother separately, but have not simultaneously compared the effects of mediation strategies of each parent on adolescents' online disclosure (Chen et al., 2016; Lee & Chae, 2012). Due to different gender roles, this study shows that when a father uses evaluative mediation and a mother uses restrictive mediation, it is more conducive to reducing adolescents' online disclosure, especially in regards to selfinformation disclosure rather than to sharing-information disclosure. The results of this study respond to the call of Lo Cricchio et al. (2022) for a deeper exploration of the relationship between parental mediation and adolescents' online disclosure in the future. It also explains the influence process of parental mediation on children's online disclosure from the internalization process triggered by the father's evaluative mediation and the compliance process triggered by the mother's restrictive mediation. Thus, this study further extends the research on the influence of parental mediation on adolescents' online disclosure.

Third, from the perspective of sociology, this study further explores the relationship between parental mediation and adolescents' online disclosure behavior. Previous research has shown a range of findings. Some studies have shown that parental mediation can reduce adolescents' online disclosure (Liu et al., 2013; Liu et al., 2016; Lwin et al., 2008), while others showed opposite findings—that is, parental intervention can increase such disclosure (Shin & Ismail, 2014; Shin & Kang, 2016), and still others have shown no significant relationship between parental mediation and adolescents'

online disclosure (Shin et al., 2012). Using the sociological concept of gender as the moderating role, this study proves that the effects of parental mediation may be due to the different roles between the father and the mother, as well as the gender mismatch between parents and children. Specifically, this study shows that when the father uses evaluative mediation for the boys, and the mother uses restrictive mediation for the girls, adolescents' online disclosure can be more effectively reduced. The results respond to the contextual reasons for inconsistent findings in previous studies and indicate the importance of matching parents' and adolescents' gender. Moreover, this study also expands the boundary conditions for the effect of parental mediation on adolescents' online disclosure by introducing the sociological concept of gender, which provides a new response to the controversy regarding the relationship between parental mediation and adolescents' online disclosure.

Fourth, the results of this study extend the research in the field of online disclosure through a more detailed dimensional division. In previous studies, adolescents' online disclosure has been generally explored as a single dimension. However, many newer studies have indicated that adolescents disclose more than one type of information online, and these various types have different characteristics (Chen et al., 2016; Taddicken, 2014). Based on these findings, this study divides online disclosure into self-information disclosure and sharing-information disclosure, and shows that the father's evaluative mediation and the mother' restrictive mediation are more effective in reducing adolescents' self-information disclosure rather than the sharing-information disclosure.

Finally, in terms of practical management, the results of this study provide advice for parents on how to effectively supervise their children's online disclosure. Due to immaturity and lack of life experience, adolescents fail to fully understand the importance of private information protection, which can bring a high risk with the use of the internet (Lee & Chae, 2012; Shin & Kang, 2016). Parents are responsible for supervising and guiding their children's values and behavioral norms in the process of socialization (Lo Cricchio et al., 2022). The results of this study suggest that a father uses evaluative mediation when he supervises his children's online disclosure and this strategy can be more effective in reducing information disclosure, especially when used with boys, and in the case of self-information disclosure. Mothers fare better with a restrictive mediation strategy when supervising children's online information disclosure, and this strategy can be more effective in reducing the information disclosure, especially when used with girls, and in the case of self-information disclosure.

## **Limitations and Future Directions**

Some limitations in this study can be further discussed and improved upon. First, although the data of parental mediation in this study are reported by actual parents, there may be a difference between parents' real-world behavior and children's perception of such behavior. Thus, future studies can use parent-child dyadic samples to simultaneously measure the separate assessment of parental mediation of parents and

children to improve measurement accuracy. Second, the age difference between adolescents is not taken into account in this study, and some studies have shown that adolescents of different ages have different online disclosure behaviors (Xie & Kang, 2015). Thus, future research can further explore parental mediation effects on online disclosure at different ages. Third, this study takes China as the research background. In China, the gender roles of males and females are more traditional, which may be different from those in Western countries. Thus, cross-country or cross-cultural comparison studies might be explored in the future. Finally, based on the sociological perspective, this study only considers the gender of parents and children to explain the inconsistent results of previous studies. Future studies should consider whether other contextual factors also play a role in explaining the inconsistent results, such as adolescents' self-efficacy toward online behavior (Dienlin & Metzger, 2016).

## 此页开始为参考文献部分

## 参考文献:

- Anderson, M., & Jiang, J. (2018). Teens, social media & technology 2018. Pew Research Center, 31(2018), 1673-1689.
- Anger, S., & Heineck, G. (2010). Do smart parents raise smart children? The intergenerational transmission of cognitive abilities. Journal of Population Economics, 23(3), 1105-1132.
- Austin, E. W. (1993). Exploring the effects of active parental mediation of television content. Journal of Broadcasting & Electronic Media, 37(2), 147-158.
- Austin, E. W., Pinkleton, B. E., & Fujioka, Y. (2000). The role of interpretation processes and parental discussion in the media's effects on adolescents' use of alcohol. Pediatrics, 105(2), 343-349.
- Bevan, J. L., Cummings, M. B., Kubiniec, A., Mogannam, M., Price, M., & Todd, R. (2015). How are important life events disclosed on Facebook? Relationships with likelihood of sharing and privacy. Cyberpsychology, Behavior, and Social Networking, 18(1), 8-12.
- Buijzen, M., & Valkenburg, P. M. (2003). The unintended effects of television advertising: A parent-child survey. Communication Research, 30(5), 483-503.
- Chang, C.-W., & Heo, J. (2014). Visiting theories that predict college students' self-disclosure on Facebook. Computers in Human Behavior, 30, 79-86.

- Chen, H., Beaudoin, C. E., & Hong, T. (2016). Teen online information disclosure:

  Empirical testing of a protection motivation and social capital model. Journal of the Association for Information Science and Technology, 67(12), 2871-2881.
- Christofides, E., Muise, A., & Desmarais, S. (2011). Hey Mom, What's on Your Facebook? Comparing Facebook Disclosure and Privacy in Adolescents and Adults. Social Psychological and Personality Science, 3(1), 48-54.
- Christofides, E., Muise, A., & Desmarais, S. (2012). Risky disclosures on Facebook:

  The effect of having a bad experience on online behavior. Journal of adolescent research, 27(6), 714-731.
- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: a meta-analytic review. Psychological Bulletin, 116(3), 457-475.
- Cotte, J., & Wood, S. L. (2004). Families and innovative consumer behavior: A triadic analysis of sibling and parental influence. Journal of Consumer Research, 31(1), 78-86.
- Dienlin, T., & Metzger, M. J. (2016). An Extended Privacy Calculus Model for SNSs:

  Analyzing Self-Disclosure and Self-Withdrawal in a Representative U.S. Sample.

  Journal of Computer-Mediated Communication, 21(5), 368-383.
- Diney, T., McConnell, A. R., & Smith, H. J. (2015). Research commentary—informing privacy research through information systems, psychology, and behavioral economics: thinking outside the "APCO" box. Information Systems Research, 26(4), 639-655.

- De Paola, M. (2013). The determinants of risk aversion: the role of intergenerational transmission. German Economic Review, 14(2), 214-234.
- Dohmen, T., Falk, A., Huffman, D., & Sunde, U. (2012). The intergenerational transmission of risk and trust attitudes. The Review of Economic Studies, 79(2), 645-677.
- Drake, C. E., Primeaux, S., & Thomas, J. (2017). Comparing Implicit Gender Stereotypes Between Women and Men with the Implicit Relational Assessment Procedure. Gender Issues, 35(1), 3-20.
- Forest, A. L., & Wood, J. V. (2012). When Social Networking Is Not Working:

  Individuals With Low Self-Esteem Recognize but Do Not Reap the Benefits of
  Self-Disclosure on Facebook. Psychological Science, 23(3), 295-302.
- Gershoff, E. T. (2002). Corporal punishment by parents and associated child behaviors and experiences: a meta-analytic and theoretical review. Psychological Bulletin, 128(4), 539-579.
- Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view.

  Developmental psychology, 30(1), 4.
- Halberstadt, A. G., Langley, H. A., Hussong, A. M., Rothenberg, W. A., Coffman, J. L.,Mokrova, I., & Costanzo, P. R. (2016). Parents' understanding of gratitude in children: A thematic analysis. Early Childhood Research Quarterly, 36, 439-451.
- Hawk, S.T., van den Eijnden, R.J.J.M., van Lissa, C.J., & ter Bogt, T.F.M. (2019).

  Narcissistic Adolescents' Attention-Seeking Following Social Rejection: Links

- with Social Media Disclosure, Problematic Social Media Use, and Smartphone Stress, Computers in Human Behavior (92) 65-75.
- Hess, M., Ittel, A., & Sisler, A. (2014). Gender-specific macro- and micro-level processes in the transmission of gender role orientation in adolescence: The role of fathers. European Journal of Developmental Psychology, 11(2), 211-226.
- Hitlin, S. (2006). Parental influences on children's values and aspirations: Bridging two theories of social class and socialization. Sociological Perspectives, 49(1), 25-46.
- Hossain, Z., & Anziano, M. C. (2008). Mothers' and fathers' involvement with schoolage children's care and academic activities in Navajo Indian families. Cultural Diversity and Ethnic Minority Psychology, 14(2), 109-117.
- Hsieh, Y. C., Chiu, H. C., & Lin, C. C. (2006). Family communication and parental influence on children's brand attitudes. Journal of Business Research, 59(10-11), 1079-1086.
- Jia, H., Wisniewski, P. J., Xu, H., Rosson, M. B., & Carroll, J. M. (2015). Risk-Taking as a Learning Process for Shaping Teen's Online Information Privacy Behaviors.

  Association for Computing Machinery, 583-599.
- Joinson, A., Reips, U.-D., Buchanan, T., & Schofield, C. B. P. (2010). Privacy, Trust, and Self-Disclosure Online. Human-Computer Interaction, 25(1), 1-24.
- Kang, H., Shin, W., & Huang, J. (2021). Teens' privacy management on video-sharing social media: the roles of perceived privacy risk and parental mediation. Internet Research, 32(1), 312-334.

- Kelman, H. C. (1958). Compliance, identification, and internalization three processes of attitude change. Journal of Conflict Resolution, 2(1), 51-60.
- Kochanska, G. (2002). Committed compliance, moral self, and internalization: a mediational model. Developmental psychology, 38(3), 339-351.
- Laghi, F., Pallini, S., & Sclavis, R. D. (2012). Values similarity between parents and adolescents: A preliminary investigation among Italian adolescents. Journal of Comparative Family Studies, 43(6), 915-923.
- Lee, G. (2000). Family, Socialization and Interaction Process. Journal of Marriage and Family, 62(3), 852-853.
- Lee, S. J. (2013). Parental restrictive mediation of children's internet use: Effective for what and for whom? New Media and Society, 15(4), 466-481.
- Lee, S. J., & Chae, Y. G. (2007). Children's internet use in a family context: Influence on family relationships and parental mediation. Cyberpsychology and Behavior, 10(5), 640-644.
- Lee, S. J., & Chae, Y. G. (2012). Balancing participation and risks in children's internet use: The role of internet literacy and parental mediation. Cyberpsychology, Behavior, and Social Networking, 15(5), 257-262.
- Lekes, N., Joussemet, M., Koestner, R., Taylor, G., Hope, N. H., & Gingras, I. (2011).

  Transmitting intrinsic value priorities from mothers to adolescents: The moderating role of a supportive family environment. Child Development Research, 2011, 1.

- Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., & Rainie, L. (2011). Teens, kindness and cruelty on social network sites: how American teens navigate the new world of "digital citizenship". Pew Internet & American Life Project, 25(12), 86.
- Liu, C., Ang, R. P., & Lwin, M. O. (2013). Cognitive, personality, and social factors associated with adolescents' online personal information disclosure. Journal of adolescence, 36(4), 629-638.
- Liu, C., Ang, R. P., & Lwin, M. O. (2016). Influences of narcissism and parental mediation on adolescents' textual and visual personal information disclosure in Facebook. Computers in Human Behavior, 58, 82-88.
- Liu, C., Lwin, M., & Ang, R. (2019). Parents' role in teens' personal photo sharing: a moderated mediation model incorporating privacy concerns and network size.

  Makara Human Behavior Studies in Asia, 23(2), 145-151.
- Liu, J. H.-f., Yeh, K.-H., Wu, C.-W., Liu, L., & Yang, Y. (2015). The importance of gender and affect in the socialization of adolescents' beliefs about benevolent authority: Evidence from Chinese indigenous psychology. Asian Journal of Social Psychology, 18(2), 101-114.
- Livingstone, S., & Helsper, E. J. (2008). Parental Mediation of Children's Internet Use.

  Journal of Broadcasting & Electronic Media, 52(4), 581-599.
- Lo Cricchio, M. G., Palladino, B. E., Eleftheriou, A., Nocentini, A., & Menesini, E. (2022). Parental Mediation Strategies and Their Role on Youths' Online Privacy Disclosure and Protection. European Psychologist, 27(2), 116-130.

- Lwin, M., Stanaland, A., & Miyazaki, A. (2008). Protecting children's privacy online:

  How parental mediation strategies affect website safeguard effectiveness. Journal of Retailing, 84(2), 205-217.
- Madge, C., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, social integration and informal learning at university: 'It is more for socialising and talking to friends about work than for actually doing work'. Learning, Media and Technology, 34(2), 141-155.
- Manago, A. M., Taylor, T., & Greenfield, P. M. (2012). Me and my 400 friends: the anatomy of college students' Facebook networks, their communication patterns, and well-being. Developmental psychology, 48(2), 369-380.
- McKinney, C., & Stearns, M. (2021). Parental psychopathology and oppositional defiant problems in emerging adults: Moderated mediation by temperament and gender. Child Psychiatry & Human Development, 52(3), 439-449.
- Mesch, G. S. (2009). Parental mediation, online activities, and cyberbullying. Cyberpsychology and Behavior, 12(4), 387-393.
- Montgomery, J. E., Chaviano, C. L., Rayburn, A. D., & McWey, L. M. (2017). Parents at-risk and their children: intersections of gender role attitudes and parenting practices. Child & Family Social Work, 22(3), 1151-1160.
- Moore, J. N., Raymond, M. A., Mittelstaedt, J. D., & Tanner Jr, J. F. (2002). Age and consumer socialization agent influences on adolescents' sexual knowledge, attitudes, and behavior: Implications for social marketing initiatives and public policy. Journal of Public Policy & Marketing, 21(1), 37-52.

- Moschis, G. P., & Churchill Jr, G. A. (1978). Consumer socialization: A theoretical and empirical analysis. Journal of marketing research, 15(4), 599-609.
- Nathanson, A. I. (1999). Identifying and explaining the relationship between parental mediation and children's aggression. Communication research, 26(2), 124-143.
- Nathanson, A. I. (2001). Parent and child perspectives on the presence and meaning of parental television mediation. Journal of broadcasting & electronic media, 45(2), 201-220.
- Navarro, R., Serna, C., Martínez, V., & Ruiz-Oliva, R. (2013). The role of Internet use and parental mediation on cyberbullying victimization among Spanish children from rural public schools. European Journal of Psychology of Education, 28(3), 725-745.
- Necker, S., & Voskort, A. (2014). Intergenerational transmission of risk attitudes—A revealed preference approach. European Economic Review, 65, 66-89.
- Oliva, A. (2004) Adolescence: Risks and opportunities, Journal for the Study of Education and Development, 27(1), 115-122.
- Peterson, G. W., Rollins, B. C., & Thomas, D. L. (1985). Parental Influence and Adolescent Conformity: Compliance and Internalization. Youth & Society, 16(4), 397-420.
- Phares, V., Fields, S., & Kamboukos, D. (2009). Fathers' and mothers' involvement with their adolescents. Journal of child and family studies, 18(1), 1-9.

- Philip, M., Getachew, A., Shaka, N., & Begum, S. (2019). The Congruence Between Adolescents and Their Parents' Gender-Role Attitudes in Urban Slums of Allahabad, India. Gender Issues, 37(3), 223-240.
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. Handbook of personal relationships: Theory, research and interventions, 367-389.
- Rimal, R. N., & Real, K. (2005). How behaviors are influenced by perceived norms: A test of the theory of normative social behavior. Communication research, 32(3), 389-414.
- Roberts, J. A., Yaya, L. H. P., & Manolis, C. (2014). The invisible addiction: cell-phone activities and addiction among male and female college students. Journal of Behavioral Addictions, 3(4), 254-265.
- Schiffman, L.G., & Kanuk, L.L. (2004). Consumer Behavior 8th Ed. Upper Saddle, 21.
- Schindler, R. M., Lala, V., & Corcoran, C. (2014). Intergenerational influence in consumer deal proneness. Psychology & Marketing, 31(5), 307-320.
- Schwartz, S. H., & Rubel, T. (2005). Sex differences in value priorities: cross-cultural and multimethod studies. Journal of personality and social psychology, 89(6), 1010-1028.
- Shin, W., Huh, J., & Faber, R. J. (2012). Tweens' Online Privacy Risks and the Role of Parental Mediation. Journal of Broadcasting & Electronic Media, 56(4), 632-649.
- Shin, W., & Ismail, N. (2014). Exploring the role of parents and peers in young adolescents' risk taking on social networking sites. Cyberpsychology, Behavior, and Social Networking, 17(9), 578-583.

- Shin, W., & Kang, H. (2016). Adolescents' privacy concerns and information disclosure online: The role of parents and the Internet. Computers in Human Behavior, 54, 114-123.
- Smith, H. J., Dinev, T., & Xu, H. (2011). Information privacy research: an interdisciplinary review. MIS quarterly, 35(4), 989-1015.
- Spies Shapiro, L. A., & Margolin, G. (2014). Growing up wired: Social networking sites and adolescent psychosocial development. Clinical child and family psychology review, 17(1), 1-18.
- Stearns, M., & McKinney, C. (2020). Perceived Parental Anxiety and Depressive Problems and Emerging Adult Oppositional Defiant Problems: Moderated Mediation by Psychological and Physical Maltreatment and Gender. Fam Process, 59(2), 651-665.
- Story, M., Neumark-Sztainer, D., & French, S. (2002). Individual and environmental influences on adolescent eating behaviors, Journal of the American Dietetic Association, 102 (3), 40-51.
- Szkody, E., Steele, E. H., & McKinney, C. (2020). Links between parental socialization of coping on affect: Mediation by emotion regulation and social exclusion. Journal of Adolescence, 80, 60-72.
- Taddicken, M. (2014). The 'Privacy Paradox' in the Social Web: The Impact of Privacy Concerns, Individual Characteristics, and the Perceived Social Relevance on Different Forms of Self-Disclosure. Journal of Computer-Mediated Communication, 19(2), 248-273.

- Tam, V. C. (2009). A comparison of fathers' and mothers' contributions in the prediction of academic performance of school-age children in Hong Kong. International Journal of Psychology, 44(2), 147-156.
- Tversky, A., & Kahneman, D. (1974) Judgment under uncertainty: Heuristics and biases," Science (American Association for the Advancement of Science) (185:4157), 1124-1131.
  - Updegraff, K. A., Delgado, M. Y., & Wheeler, L. A. (2009). Exploring Mothers' and Fathers' Relationships with Sons Versus Daughters: Links to Adolescent Adjustment in Mexican Immigrant Families. Sex Roles, 60(7-8), 559-574.
  - Valkenburg, P. M., Piotrowski, J. T., Hermanns, J., & de Leeuw, R. (2013). Developing and Validating the Perceived Parental Media Mediation Scale: A Self-Determination Perspective. Human Communication Research, 39(4), 445-469.
  - van der Vleuten, M., Jaspers, E., Maas, I., & van der Lippe, T. (2018). Intergenerational transmission of gender segregation: How parents' occupational field affects gender differences in field of study choices. British Educational Research Journal, 44(2), 294-318.
- Van Gool, E., Van Ouytsel, J., Ponnet, K., & Walrave, M. (2015). To share or not to share? Adolescents' self-disclosure about peer relationships on Facebook: An application of the Prototype Willingness Model. Computers in Human Behavior, 44, 230-239.

- VanMeter, R.A., Grisaffe, D.B., & Chonko, L.B. (2015). Of "likes" and "pins": The effects of consumers' attachment to social media. Journal of Interactive Marketing (32), 70-88.
- Van Ouytsel, J., Walrave, M., & Ponnet, K. (2014). How Schools Can Help Their Students to Strengthen Their Online Reputations. The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 87(4), 180-185.
- Warren, R., Gerke, P., & Kelly, M. A. (2002). Is there enough time on the clock?

  Parental involvement and mediation of children's television viewing. Journal of Broadcasting & Electronic Media, 46(1), 87-111.
- Wright, M. (2018). Cyberbullying victimization through social networking sites and adjustment difficulties: The role of parental mediation. Journal of the Association for Information Systems, 19(2), 1.
- Xie, W., & Kang, C. (2015). See you, see me: Teenagers' self-disclosure and regret of posting on social network site. Computers in Human Behavior, 52, 398-407.
- Yang, Z. (2008). The Parent-Self-Peer Model. Saarbrücken, Germany: VDM Verlag Publishing Company.
- Yang, Z., & Laroche, M. (2011). Parental responsiveness and adolescent susceptibility to peer influence: A cross-cultural investigation. Journal of Business Research, 64(9), 979-987.

## 此页开始为致谢页

1. 论文的选题来源、研究背景;

选题来源为自选,现在大家都拥有手机、平板电脑或者笔记本电脑,让我们有机会使用各种社交媒体。我们喜欢在上面发帖,既发布自己的信息,也发布共享的信息,这是两种不同的隐私披露。但是我也经常在新闻上看到这些隐私披露导致的严重后果。所以,我在思考如何减少青少年的隐私披露。传统的信息经济学是从风险和收益的视角进行分析,而青少年经常高估收益,低估风险。因此,我另辟蹊径,选择从父母干预的视角,探索何种干预措施能有效减少青少年不同类型的隐私披露。

2. 每一个队员在论文撰写中承担的工作以及贡献;

团队中只有我一个队员,我在Yang教授的指导下完成论文。 论文中不包含其他人已经发表或撰写过的研究成果。

3. 指导老师在论文写作过程中所起的作用,及指导是否有偿;

Yang教授在选题凝练、理论分析、调研过程、使用SPSS和 Mplus统计软件,以及论文写作的逻辑性和技巧方面,都进行无偿指导。

4. 他人协助完成的研究成果。

无。

如果有必要,最后可以列出团队成员和指导老师的简历。

上海市民办万源城协和双语学校 11 年级学生 (2022 年 9 月进入 11 年级) 指导老师: Zhivong Vang

指导老师: Zhiyong Yang

2022-06 至现在,美国迈阿密大学法默商学院,教授

2018-08 至 2022-06, 美国北卡罗来纳州立大学格林斯伯勒分校 商学院, 教授

2018-04 至 2018-07, 美国德克萨斯大学阿灵顿分校商学院, 教授 2013-04 至 2018-03, 美国德克萨斯大学阿灵顿分校商学院, 副教 授

2007-08至2013-03,美国德克萨斯大学阿灵顿分校商学院,助理 教授

2002-09 至 2007-06, 加拿大康考迪亚大学, 市场营销专业, 获博