# Psychological Underpinnings of Communication Channel Choice in Socio-Emotional Contexts

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# ABSTRACT

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Communication about socio-emotional issues can come with a range of pleasant or undesirable experiences for those involved. For example, while we might be eager to share with someone the news about our most recent achievement, telling them we will cancel our long-planned trip definitely puts us in a certain distress. In advance of such conversations, people anticipate their course and potential impact, and accordingly pursue communicational strategies that minimize negative and maximize positive experiences and outcomes. One powerful means in this endeavor is the deliberate choice of communication channels that support those strategies. As mediated channels differ from face-to-face conversations in several regards and to varying degrees, they are perceived more or less suited for the pursuit of different communication goals. The present thesis is thus dedicated to the psychological question of why people choose particular channels in socio-emotional situations (research question 1), how their choices differ between contexts (research question 2), and how those choices could be influenced (research question 3). The included set of six studies follows this structure of interrelated research questions.

A first qualitative study explored the variety of reasons people refer to when choosing channels for socio-emotional communication and associates them with channel characteristics or contextual factors (study 1.1). Qualitative responses are linked to existing theoretical concepts and further transposed into an integrative model of different reasons behind communication channel choices. Basically, three sets of categories are identified in pragmatic, symbolic, and control-based reasons. Pragmatic reasons comprise choices out of convenience or habit that happen rather casually. Symbolic reasons pertain to choices that occur consciously but are largely predetermined by the respective situation. Control-based reasons are classified as reasons that stem from the intention to deliberately influence the communication process. These control-based reasons are further distinguished into categories of interaction control, i.e., reasons focusing on the synchronicity of channels, and emotion control, i.e., reasons focusing on the richness of channels. These two kinds of control-based reasons represent instances of strategic channel choice, which are the main focus of subsequent studies presented within this thesis.

A potential psychological mechanism behind the strategic choice of channels is the intention to utilize their varying degree of subjective buffer, which regulates the interactional and emotional intensity of communication. This buffer effect of channels is defined as their subjective capacity to provide a psychological shield between individuals that mitigates emotional exposure

and facilitates deliberate disclosure. Communication channels with a higher buffer effect therefore support face-saving impression management and the pursuit self-presentational goals. Studies 2.1 - 2.4 explored under which contextual circumstances people tend to strategically choose communication channels with higher buffer effects. This occurred when senders were to deliver negative (vs. positive) messages and when the socio-emotional issue focused on themselves (vs. the receiver) (study 2.1). The same preferences were shown by receivers, i.e., they chose channels with a higher buffer effect if the message was negative (vs. positive) and focused on themselves (vs. the sender) (study 2.2). I ascribe these tendencies in channel choices to a generally increased salience of self-presentational goals in socio-emotional communication, especially when the issue is negative and revolves around oneself.

In close relationships, however, effects of valence were inverted, such that senders chose channels with lower buffer effects in negative (vs. positive) situations, while the opposite held true in distant relationships (study 2.3). There was no effect regarding the locus of the issue (focus on sender vs. receiver) in either of the relationship conditions. I attribute this moderating effect of interpersonal closeness to the increased relevance of relational goals (compared to self-presentational goals) in close relationships. A general decline in the relevance of self-presentational goals might also explain why people in a work context chose channels with higher buffer effects for communicating negative (vs. positive) messages to recipients of a superior or equal hierarchical status, while there was no difference for subordinates (study 2.4).

An additional study explored the possibility to influence channel choice without changing the socio-emotional context itself by manipulating an individual's regulatory focus (study 3.1). Following a regulatory focus induction, people's channel choices in a potential conflict situation were assessed. The induction of a prevention (vs. promotion) focus led to the choice of channels with higher buffer effects and to a lower probability of choosing richer communication media, even when controlled for chronic regulatory focus and interpersonal closeness. This exploration constitutes a first example of how communication channel research could advance its implications by not only examining determinants and outcomes of channel choices but also ways to intentionally influence them.

Following the overview of empirical studies and their concise summary, I elaborate on how they add to previous research and why widely applied media theories are frequently not suited to predict channel choices in socio-emotional situations. In order to not further the proliferation of theories in the field, I point out how the delivered insights can be integrated into the different stages of the impression management model, on which several of the present studies are predicated on. Subsequently, I present practical implications that may be

derived from these works and refer to exemplary technical implementations that can serve as an orientation in this endeavor. This thesis concludes with a discussion of its limitations and directions for future research that go beyond what is already covered by the constituent works.

# Zusammenfassung

Die Kommunikation über sozio-emotionale Themen kann für die Beteiligten einhergehen mit einer Reihe von angenehmen und unerwünschten Erfahrungen. Während wir beispielsweise erpicht darauf sind, Neuigkeiten über unsere neuste Errungenschaft mit jemandem zu teilen, bringt uns das Absagen einer lang geplanten gemeinsamen Reise durchaus in eine gewisse Bedrängnis. Im Vorfeld solcher Gespräche antizipieren Menschen deren Verlauf und Auswirkungen und verfolgen bewusst Strategien bei der Kommunikation, die zur Minimierung negativer und Maximierung positiver Erlebnisse und Konsequenzen führen. Ein wirksames Mittel in diesem Unterfangen ist die bewusste Wahl von Kommunikationskanälen, die diese Strategien unterstützen. Da Kommunikationsmedien sich in mehrerlei Hinsicht und zu unterschiedlichen Graden von persönlichen Gesprächen unterscheiden, werden sie mehr oder weniger geeignet für die Verfolgung unterschiedlicher Kommunikationsziele wahrgenommen. Die vorliegende Arbeit widmet sich daher der psychologischen Fragestellung, warum Personen bestimmte Kanäle in sozio-emotionalen Situationen wählen (Forschungsfrage 1), wie ihre Wahl zwischen Kontexten variiert (Forschungsfrage 2) und wie die Entscheidung zwischen Kanälen beeinflusst werden kann (Forschungsfrage 3). Die hier enthaltene Zusammenstellung von sechs Studien folgt dieser Struktur ineinander verwobener Forschungsfragen.

Eine erste qualitative Studie diente der Exploration der Vielzahl an Gründen, auf die sich Leute beziehen, wenn sie Kanäle für sozio-emotionale Kommunikation wählen, und bringt diese in Verbindung mit Kanalcharakteristiken oder Kontextfaktoren (Studie 1.1). Die qualitativen Antworten werden mit bestehenden theoretischen Konzepten verknüpft und daraufhin übertragen in ein integratives Modell von Beweggründen, die hinter der Wahl von Kommunikationskanälen stehen. Grundsätzlich werden mit pragmatischen, symbolischen und kontroll-basierten Gründen drei Arten von Kategorien identifiziert. Pragmatische Gründe umfassen Wahlentscheidungen aus Bequemlichkeit oder Gewohnheit, die eher beiläufig auftreten. Symbolischen Gründe beziehen sich auf eine Wahl, die bewusst geschieht, aber größtenteils vorgegeben ist durch die jeweilige Situation. Als kontroll-basierte Gründe sind diejenigen Gründe klassifiziert, die der Absicht entspringen, den Kommunikationsprozess bewusst zu beeinflussen. Diese kontroll-basierten Gründe sind weiter unterteilt in die Kategorien Interaktionskontrolle, d.h., Gründe, die auf der Synchronität von Kommunikationskanälen aufbauen, und Emotionskontrolle, d.h., Gründe, die auf der Reichhaltigkeit von Kommunikationskanälen fußen. Diese beiden

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Arten von kontroll-basierten Gründen repräsentieren Fälle strategischer Kommunikationskanalwahl, auf denen der Hauptfokus der in dieser Arbeit anschließend dargestellten Studien liegt.

Ein potenzieller psychologischer Mechanismus hinter der Wahl von Kommunikationskanälen ist die Absicht, sich deren unterschiedliche Grade an subjektivem Puffer zunutze zu machen, welcher die Interaktions- und Emotionsintensität bei der Kommunikation beeinflusst. Dieser Puffer-Effekt von Kommunikationskanälen wird definiert als ihre subjektive Fähigkeit einen psychologischen Schutzschild zwischen Individuen zu schaffen, der das emotionale Erleben bei der Kommunikation abschwächt und eine bewusste Preisgabe von Informationen erleichtert. Dementsprechend unterstützen Kommunikationskanäle mit höherem Puffer-Effekt eine gesichtswahrende Steuerung des Eindrucks auf andere (engl. *impression management*) und damit die Verfolgung von Selbstdarstellungszielen. Die Studien 2.1 – 2.4 untersuchten, unter welchen kontextuellen Rahmenbedingungen Menschen dazu tendieren, strategisch Kommunikationskanäle mit einem höheren Puffer-Effekt zu wählen. Dies trat auf, wenn Sender eine negative (vs. positive) Nachricht überbringen sollten und wenn sich das sozio-emotionale Thema auf sie selbst (vs. den Empfänger) bezog (Studie 2.1). Für Empfänger zeigten sich dieselben Präferenzen, d.h., sie wählten Kanäle mit höherem Puffer-Effekt, wenn die Nachricht negativ (vs. positiv) war und die eigene Person (vs. den Sender) betraf (Studie 2.2). Ich führe diese Kanalentscheidungen auf eine grundsätzlich gesteigerte Salienz von Selbstdarstellungszielen bei der sozio-emotionalen Kommunikation zurück, insbesondere, wenn das Thema negativ ist und sich um einen selbst dreht.

In engen Beziehungen hingegen zeigten sich umgekehrte Valenz-Effekte, sodass Sender in negativen (vs. positiven) Situationen Kanäle mit niedrigerem Puffer-Effekt wählten, während in distanzierten Beziehungen das Gegenteil der Fall blieb (Studie 2.3). In keiner der Beziehungsbedingungen zeigte sich ein Effekt der Lokalisierung des Themas (Fokus auf Sender vs. Empfänger). Ich schreibe diesen Moderationseffekt zwischenmenschlicher Nähe der gesteigerten Relevanz von Beziehungszielen (im Vergleich zu Selbstdarstellungszielen) in engen Beziehungen zu. Eine generelle Abnahme der Relevanz von Selbstdarstellungszielen könnte auch erklären, warum Personen im Arbeitskontext Kommunikationskanäle mit einem höheren Puffer-Effekt wählten, um negative (vs. positive) Nachrichten an Empfänger eines höheren oder gleichen hierarchischen Status zu überbringen, während sich kein Unterschied für untergeordnete Empfänger zeigte (Studie 2.4).

Eine weitere Studie untersuchte die Möglichkeit, Kanalentscheidungen zu beeinflussen, ohne den sozio-emotionalen Kontext zu verändern, indem der regulatorische Fokus eines Individuums manipuliert wird (Studie 3.1). Im

Anschluss an die Induktion eines regulatorischen Fokus wurde die Kanalwahl von Personen in einer potenziellen Konfliktsituation erhoben. Die Induktion eines Präventions-Fokus (vs. Promotions-Fokus) führte zur Wahl von Kanälen mit einem höheren Puffer-Effekt und zu einer niedrigeren Wahrscheinlichkeit sich für reichhaltigere Kommunikationskanäle zu entscheiden, sogar wenn für den Einfluss des chronischen regulatorischen Fokus und der zwischenmenschlichen Nähe kontrolliert wurde. Diese Untersuchung bietet ein erstes Beispiel dafür, wie die Forschung zu Kommunikationskanälen ihre Anwendungsbereiche noch erweitern könnte, indem nicht nur Voraussetzungen und Auswirkungen von Kanalentscheidungen untersucht werden, sondern auch Wege diese bewusst zu beeinflussen.

Im Anschluss an den Überblick über die empirischen Studien und deren knappe Zusammenfassung führe ich weiter aus, wie sie zu früherer Forschung beitragen und warum weit verbreitete Medientheorien häufig nicht geeignet sind, um Kanalentscheidungen in sozio-emotionalen Situationen vorherzusagen. Um nicht weiter zur ausufernden Zahl an Theorien im Forschungsfeld beizutragen, wird aufgezeigt, wie die gewonnenen Einsichten in die verschiedenen Stufen des Eindruckssteuerungsmodells (engl. *impression management model*), auf dem einige der vorliegenden Studien aufbauen, integriert werden können. Daran anschließend präsentiere ich praktische Implikationen, die von diesen Arbeiten abgeleitet werden können, und nehme Bezug auf beispielhafte technische Umsetzungen, die hierbei als Orientierung dienen könnten. Die Arbeit schließt ab mit einer Diskussion ihrer Limitationen und zukünftiger Forschungsrichtungen, die über das hier dargestellte Forschungsvorhaben hinausgehen.

# CONTENTS

# INTRODUCTION

*For no man delights in the bearer of bad news.*

– Guard in *Antigone* (Sophocles, ca. 442 B.C.E./2021)

People's tendency to react hostile and blame the bearer of bad news was already known thousands of years ago, resulting in the nowadays well-known phrase "Don't shoot the messenger". While positive messages constitute no burden and one might even want to experience their delivery to the fullest, bad news can leave a recipient in hard-to-watch despair or even cause him to lash out and blame its sender. Hence, it seemed reasonable, even back then, for senders to use a messenger that mediates communication.

Obviously, today's circumstances differ from those in ancient times, and there are various communication channels and technologies that can replace the role of a living messenger. But the underlying cognitive and emotional processes on both sides, on sender's as well as receiver's, have not changed. People are still reluctant to share bad news and recipients are certainly prone to negative reactions in response to their receipt. And we regularly encounter such situations, which makes the transmission of bad news a challenge of everyday relevance. Some prototypical scenarios are to be found in the doctor who has to reveal serious medical issues to his or her patients (Ptacek & Eberhardt, 1996), the boss who has to dismiss an employee (Wood & Karau, 2009) or the person who wants to break up and has to tell a former partner that the love is gone (Gershon, 2008). However, while definitely serious and unpleasant, those situations are somewhat special, since there is either no one at fault (medical issues) or the relationship ends from this point in time (dismissals and breakups). But even more frequent, or at least more profound, are situations in which we have to communicate with others about issues that elicit disapproval or disappointment without permanently damaging the relationship (Dibble & Sharkey, 2017). These critical situations of interpersonal relevance, and how people approach them in contrast to positive instances, are paramount to this thesis.

So how do people actually deal with these situations? Unlike in ancient times, a wide variety of communication technologies is at our disposal today and our opportunities to employ them are manifold. Early research on computer-mediated communication (CMC) was primarily interested in task effectiveness and which technological alternatives come with the least disadvantages compared to real conversations. Back then, communication media was considered inferior to face-to-face conversations as the "ideal" way of communication (El-Shinnawy & Markus, 1992). But along with the

development and dissemination of those technologies, people also learned to deal with their unique characteristics and utilize them – not only for task fulfilment but also for interpersonal purposes, e.g., the exchange of socioemotional content (Rice & Love, 1987), intentional persuasion (Kayany et al., 1996) or mutual deception (J. R. Carlson & George, 2004). The present thesis focuses on these interpersonal applications and wants to shed light on the psychological underpinnings of communication channel choice in socio-emotional contexts.

Although CMC research soon recognized the importance of communication media for social purposes, it surprisingly paid less attention on the reasons why people use particular channels for certain kinds of socio-emotional messages for a long time (Riordan & Kreuz, 2010). And even up until today, investigations on channel preferences and choices in the face of positive and negative situations are still scarce or inconclusive (Au & Chan, 2013; Dibble, 2018; Feaster, 2010; Ledbetter & Herbert, 2020; O'Sullivan, 2000; Westerman et al., 2019). Considering the relevance of delivering emotional content in everyday life on the one hand, and people's tendency to strategically utilize communication channels on the other, the present thesis aims to further the understanding of their interplay and answer three central research questions that substantially guided its constituent studies.

# RESEARCH GAPS AND RESEARCH QUESTIONS

The research questions behind this thesis address the choice of communication channels from basically three perspectives: First, why do people choose certain communication channels in socio-emotional contexts? Second, what differences arise between those choices in different socio-emotional contexts? And third, how can the choice of channels be influenced without changing the socio-emotional context itself? In the following section, I will further lay out the rationale behind those research questions, which gaps the conducted studies addressed, and how they contribute to the current literature.

Research on computer-mediated communication basically follows two lines of theoretical perspectives: Approaches that put the medium and its objective or subjective characteristics into focus and approaches that center on the user and the psychological (dis-)advantages he or she draws from using a particular medium. Without diving too deep into the matter at this point, each of these perspectives yielded many theories and there is always at least one to explain a certain channel choice in hindsight. However, if we do not know which theory to apply in a given situation, we are not satisfyingly able to actually predict behavior beforehand. To come to reliable predictions, it seems inevitable to understand the psychological processes underlying channel choice and identify the contextual circumstances that contribute to their emergence. While research on the role of emotions in CMC, their processing and outcomes, is manifold (Derks et al., 2008; Rains et al., 2016; Ruppel et al., 2017), there is substantially less known about the psychological process of choosing a specific channel before communication takes place. Actually, recent approaches that describe interpersonal media choice from the cognition of the communicator mainly focus on aggregated instances over time (Ledbetter et al., 2016; Taylor & Bazarova, 2018). Therefore, this thesis is dedicated to the phenomenon of communication channel choice in particular socio-emotional situations. While Riordan and Kreuz (2010) already gathered a variety of reasons that people refer to when choosing channels in socio-emotional situations, this collection lacked a systematical structure, lumping together reasons focusing on objective characteristics (e.g., synchronicity), functions that result from them (e.g., editability), their individual perception (e.g., more comfort) or other-oriented reasons (e.g., social rules). Therefore, I formulated the following first research question:

**RQ1**: Why are people choosing certain communication channels for socio-emotional messages, what are these reasons, and how do they correspond to the central differences between channels?

Starting from that, a certain capacity of communication channels emerged that seemed to play an important role in peoples' choices, especially under negative circumstances. This capacity is the psychological buffer a communication channel provides. The so-called "buffer effect" of communication channels has been mentioned in the literature a few times (Derks & Bakker, 2010; O'Sullivan, 2000; Sussman & Sproull, 1999; Watts, 2007) and subsumes a channel's ability to establish a psychological shield between interactants that facilitates deliberate disclosure of information and reduces the emotional experience of conversations. However, previous works only speculated about the buffer effect as a driver for channel choice. It was not explicitly measured and verified that the experienced buffer of a communication channel is represented in people's channel choices. This gap is addressed by this thesis. Furthermore, people are supposed to profit from this buffer effect particularly in the transmission of bad news, since it mitigates the anticipated negative experiences and outcomes which are originally responsible for people's psychological discomfort. The reluctance to transmit bad news is also known as the MUM effect (keeping Mum about Undesirable Messages; Tesser & Rosen, 1975), which encouraged some research in context of mediated communication but without having the sender choose the channel (Dibble, 2018; Sussman & Sproull, 1999). Moreover, there is inconclusive evidence on how people's relationship influences MUM effects, as well as a lack of research on how these relational aspects may affect the decision for "buffering" channels in socio-emotional situations. Hence, the second research question was as follows:

**RQ2**: Do people choose communication channels with differing buffer effects depending on the socio-emotional context and which role does the relationship between sender and receiver play therein?

Supposedly, MUM effects and the choice of communication channels due to their buffer effect may represent manifestations of a psychological avoidance tendency in negative socio-emotional situations. However, people might also show approach tendencies, e.g., one might face an unpleasant issue to "just get it over with" or, especially in cases of impending conflicts, with the intention to resolve the underlying dissent. Such approach and avoidance motives are at the core of regulatory focus theory (Higgins, 1998). This theory

was successfully applied to a variety of application contexts (Lanaj et al., 2012; Uskul et al., 2008; J. Wang & Lee, 2006) but not yet to media choice. Furthermore, the theoretical integration and experimental manipulation of regulatory focus could illustrate a potent but previously unconsidered line of media research – the deliberate alteration of people's channel choices. There is a wide range of factors that have been shown to influence channel choice (P. J. Carlson & Davis, 1998), but none of them can be manipulated without changing the cornerstones defining the particular situation. To the best of my knowledge, there is no research on an intentional manipulation of media selection in socio-emotional situations or beyond, although various benefits can be imagined (and are discussed later). The third research question addressed this empirical exploration:

**RQ3**: How does regulatory focus influence communication channel choice in interpersonal conflicts and can its manipulation change choice behavior?

# THEORETICAL BACKGROUND

The present section provides an overview of the most relevant theories and literature that contributed to the conducted studies, while the appended manuscripts can be consulted for a more detailed theoretical introduction. Within this thesis, I refer to the phrase of computer-mediated communication (CMC) as a holistic term for all ways of communication between two persons that are not face-to-face conversations and employ some kind of technology. Since the line between individual and mass communication can be blurry, this explicitly excludes channels that address multiple recipients like social media posts or group mails (O'Sullivan & Carr, 2018). The following theoretical background first sums up the thesis' research approach to CMC and its conception of communication channels in particular. I will then shortly discuss classic communication models and introduce the impression management model of strategic channel use that originally inspired this research. Subsequently, I will present a preliminary research model that comprises the central components underlying the present collection of studies and will follow up with a step-by-step discussion of those components.

## RESEARCH APPROACH

Since there are plenty of theories in CMC research that apply a varying emphasis on channels themselves or their users, it seems appropriate to begin this theoretical overview with some remarks on the stance I take in this regard and how it represents an "affordance-based" conception of communication channels.

### CMC THEORIES

Although the telephone was already invented when mass-media like radio or television made their rise, it took advances in personal computing technologies for dyadic channels to establish as a field of research. In the following decades, CMC research yielded a vast number of factors potentially influencing channel choice and developed many sound media theories – each characterized by a distinct perspective on the interplay between user, task characteristics,

channel properties and contextual factors (P. J. Carlson & Davis, 1998; Furner & George, 2012). However, this proliferation of theories led to a point where scholars would not even agree on a common set of classifications. For example, they distinguished between media trait theories and social interaction theories (P. J. Carlson & Davis, 1998), contingency, subjectivist and situational theories (van den Hooff, 2005) or cues-filtered-out theories, experiential and perceptual theories, as well as theories of interpersonal adaptation and exploitation (Walther, 2011). And these are just categories that apparently subsume further distinct theories. With so many theoretical approaches at hand, there seems to always be a theory that provides an explanation for a person's channel choice in hindsight, regardless of which channel the person chose. However, this exacerbates the prediction of channel choices in certain situations, since it is not clear which theory to apply beforehand. This is why this thesis does not build on a certain theory in particular but refers to a more general, user-oriented perspective on channel choice.

## *Uses and Gratifications Perspective*

The uses and gratifications (U&G) perspective (Katz et al., 1973; Rubin, 2002; Sundar & Limperos, 2013) provides a promising approach to account for people's channel choices from a user's point-of-view. This theoretical perspective was originally developed with mass media in mind and recognized the user as an active agent, choosing media under the premise of it fulfilling specific needs. Such a need-based notion is also representatively captured by the concluding remarks of P. J. Carlson and Davis (1998), who propose "that the most desirable characteristic for communication is media accessibility, but that this variable is over-ridden at times by the presence of certain other needs, such as the need to communicate rich information to build relationships and interpret situations." (p. 352). Although the U&G perspective focuses primarily on general media usage patterns, and while single media choices are more influenced by situation-specific factors (Trevino et al., 2000), its fundamental idea is still expedient from a psychological point-of-view: in order to understand channel choice from a user-centered perspective, one has to be aware of the respective circumstances that elicit situationally dominant needs, motives and goals, how they are weighed against each other – and which channel characteristics satisfy them.

## *PRESENT APPROACH*

The present approach follows this subject-oriented rationale. In CMC research, it is still a common approach to either lump all mediated channels together and compare them to face-to-face communication, or to treat those channels separately but each one as a unique and distinct entity (Fox & McEwan, 2017). However, as several scholars have advocated, the field would benefit more from considering common channel characteristics and the affordances they provide their users with (Evans et al., 2017; Walther et al., 2005; Westerman et al., 2019). Basically, affordances can be thought of as the subjective perceptions of artifacts based on their objective qualities (Chan, 2017). The affordances of communication channels enable or constrain "potential behavioral outcomes in a particular context" and "emerge in the mutuality between those using technologies, the material features of those technologies, and the situated nature of use." (Evans et al., 2017, p. 2). For example, someone might prefer sending an email to convey negative news as this channel provides the user with the opportunity to craft responses deliberately (due to its a-synchronous nature) and attenuates the experience of an anticipated distressing reaction (due to the lack of non-verbal cues).

This example already illustrates how channel choice can serve as a means to strategically control the sending and receiving processes before communication even takes place. Although this notion of interactional control as an affordance has been the focus of some works on media choice in the past (Bülow et al., 2019; Feaster, 2010; Kayany et al., 1996), many approaches just assumed them to play a role but did not appropriately operationalize them in study design (Fox & McEwan, 2017). Similarly, these affordances are often treated as objective characteristics although their perception can vary significantly between individuals (Feaster, 2010, 2013; Fox & McEwan, 2017). The present work accounts for both of these limitations in its investigation of channel choices by particularly considering individuals' subjective perceptions of channels.

## THEORETICAL FRAMEWORKS

Besides the previously presented approach to communication channels, there is a handful of theoretical frameworks, some classical and a more recent model, that gave guidance to the current research. The gist of these frameworks is laid out in the following before some limitations are addressed and a comprising research model is introduced.

## *CLASSIC COMMUNICATION MODELS*

While ancient Greek philosophers saw communication basically as a means to exert influence on others (Mortensen, 1972), early research models from the mid-twentieth century heavily relied upon a mathematical conception of communication as the transmission of information between two systems, i.e., between sender and receiver (Shannon, 2001). Berlo (1960) was one of the first to put aside this technical for a more subjective perspective and described the integrative SMCR model (i.e., sender, message, channel, receiver). This model comprised the essential components of every dyadic communication situation and stood out by considering the human at both ends of the channel, i.e., each individual's communication skills, attitudes, and knowledge, as well as the social system and culture they find themselves in (Berlo, 1960). Moreover, Schramm's interactive model (Schramm, 1960) can be seen as complementing the SMCR model, as it emphasized the disregarded role of feedback in communication and how a message might impact its receiver. While this thesis is not concerned with communication processes itself, it builds on the notion that people (i.e., senders) consider a message's potential impact on the receiver and his or her feedback, and choose their channels in response to that.

With the concepts of sender and receiver, message and channel, as well as recurring feedback, a framework can be drawn that illustrates a static image of a prototypical communication situation. However, such a model captures first and foremost the transmission processes during communication but not the decision processes leading to the prior choice of a channel. In order to explain how people choose between communication channels, it is paramount to understand how they act in social situations and adapt their behavior in accordance with others. The self-presentational perspective on social interaction brought forward by Erving Goffman (1955) constitutes a seminal approach in this respect. As Goffman pointed out, "every person lives in a world of social encounters, involving him either in face-to-face or mediated contact with other participants" (p. 213) and people are eager to maintain their face in these situations (Goffman, 1955). Within this self-presentational perspective, face is considered each person's positive self-image (in terms of approved social attributes) that we want others to share. Accordingly, people tend to perform face-work in everyday encounters to act consistently with their own face (Goffman, 1955). Furthermore, when we interact with others, we constantly engage in so-called impression management behaviors, i.e., the strategic presentation of ourselves to get others to see us the way we want them to (Goffman, 1959). This notion of impression management as a driver of people's behavior in interpersonal communication is also at the core of the impression management model of strategic channel use (O'Sullivan,

2000). This model initially inspired many of the studies within this thesis and therefore shall be illustrated in the following.

- SOCIAL ENVIRONMENT -

INITIATOR'S SELF-CONCEPT

PARTNER'S SELF-CONCEPT

PERCEPTION OF SELF-PRESENTATIONALLY RELEVANT EPISODE

• Valence of Episode
• Locus of Issue

FORMULATION OF GOAL FOR EPISODE

• Maximize Rewards
• Minimize Costs

FORMULATION OF INTERACTIONAL STRATEGY FOR EPISODE

• Message Content
• Interactional Channel
  - Interactional Control
  - Symbolism
  - Social Skill

EVALUATION OF EPISODE

• Effectiveness of Strategy
• Perception of Partner's Perception

(accumulation of episodes over time)

EVALUATION OF PARTNER/RELATIONSHIP

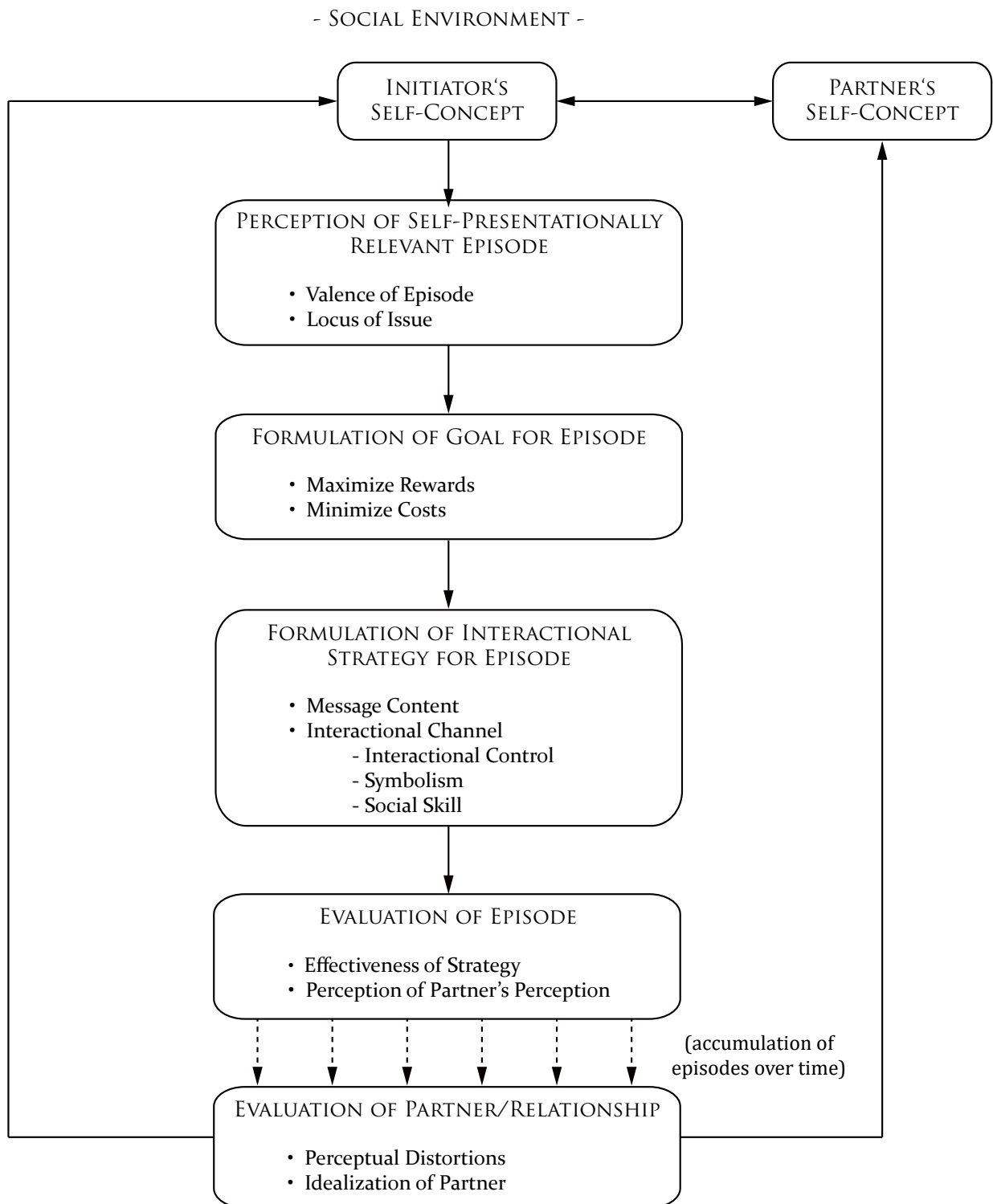• Perceptual Distortions
• Idealization of Partner

**Figure 1.** The impression management model (adapted from O'Sullivan, 2000)

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## Impression Management Model

The impression management model (IMM) of strategic channel use (O'Sullivan, 2000) provides an important theoretical framework for this thesis. According to the model, channel choice is a powerful means to establish control over the communication process with the intention to pursue impression management strategies (O'Sullivan, 2000). In contrast to the classic models outlined above, it focuses on what happens before and after a communication episode: it conceptualizes the decision process that leads up to the choice of channels when people experience self-presentational concerns and considers how multiple encounters play out in the long term (Figure 1).

More specifically, the model proposes that people hold conceptions of their own as well as their relational partner's self-concept. If people perceive a communication episode as self-presentationally relevant based on its valence and locus (further outlined below), they formulate a strategy with the goal to maximize rewards and minimize costs of the upcoming interaction. Besides message content itself, this interactional strategy includes a conscious choice of communication channel based on three aspects: the interactional control the channel provides, the symbolic meaning the channel holds, and the sender's social skills in managing interactions and using the channel. Less important for this thesis but still worth mentioning is that the model further states that people subsequently evaluate the effectiveness of their strategy and their partner's perception. Such self-presentational episodes aggregate over time and shape the subjective construction of a relationship and in turn the self-concepts of those involved.

An initial investigation of the IMM indeed supported the derived assumption that people report stronger preferences for mediated channels in negative (vs. positive) and self-centered (vs. other-centered) episodes (O'Sullivan, 2000). Those episodes were supposed to bear a higher self-presentational relevance and mediated channels were assumed to provide a better means to engage in impression management strategies. However, this study and the underlying model display some constraints that are addressed within the present thesis. First, the study exhibits some common limitations of CMC approaches outlined before (see Present Approach). It lumps all mediated channels together, comparing them to face-to-face conversations, and only implicitly infers subjective channel affordances from choice behavior (Feaster, 2010; Fox & McEwan, 2017; Ledbetter & Herbert, 2020).

Second, and even more importantly, the theoretical model pays little attention to relational concerns. Although it incorporates the notion of a changing relationship perception in response to multiple communication

episodes over time, it makes no propositions about how the perceived relationship might influence channel choice in specific situations. The model mainly juxtaposes the salience of self-face (i.e., concern for the own image) and other-face (i.e., concern for the other's image) but neglects mutual-face concerns (i.e., concern for both and the image of the relationship) (Ledbetter & Herbert, 2020). Accordingly, the IMM's theoretical value is rather limited to self-presentational goals and only considers relationship facets in the periphery. Relational communication goals, however, are one of three main categories of goals in human interaction, apart from self-presentational and instrumental goals (Canary et al., 2008). The role of relationship in communication channel choice is thus another gap this thesis addresses.

Third, the model reflects a rather plain understanding of people's communication goals by stating that one tries to minimize costs and maximize rewards. However, research on approach and avoidance motivation (Elliot, 2008) and particularly regulatory focus theory (Scholer & Higgins, 2008) has shown that people vary in their susceptibility to potential gains and losses and how much value they ascribe to them. Accordingly, they also differ in their preferences for vigilant, avoiding or eager, approaching strategies. Therefore, the present thesis also explores how differences in regulatory focus might influence people's channel choice in socio-emotional situations.

## RESEARCH MODEL

Based on the theoretical components presented above, a model comprising the current research endeavor can be drawn (Figure 2). The SMCR model (Berlo, 1960) and the concept of (anticipated) feedback (Schramm, 1960) thereby provide the general framework as they capture a basic communication process. On top of that, the IMM (O'Sullivan, 2000) informs the psychological decision process that takes place in response to a certain message but before a channel is chosen. Additionally, the current research model is extended by further theoretical concepts that played a role within the conducted studies. The remainder of this section is structured according to the model and elaborates – in that order – on the components of channel (i.e., the perceived buffer effect), message (i.e., its valence and locus), decision process (i.e., goal, strategy, choice), sender (i.e., situational regulatory focus) and receiver (i.e., the relationship between people involved).
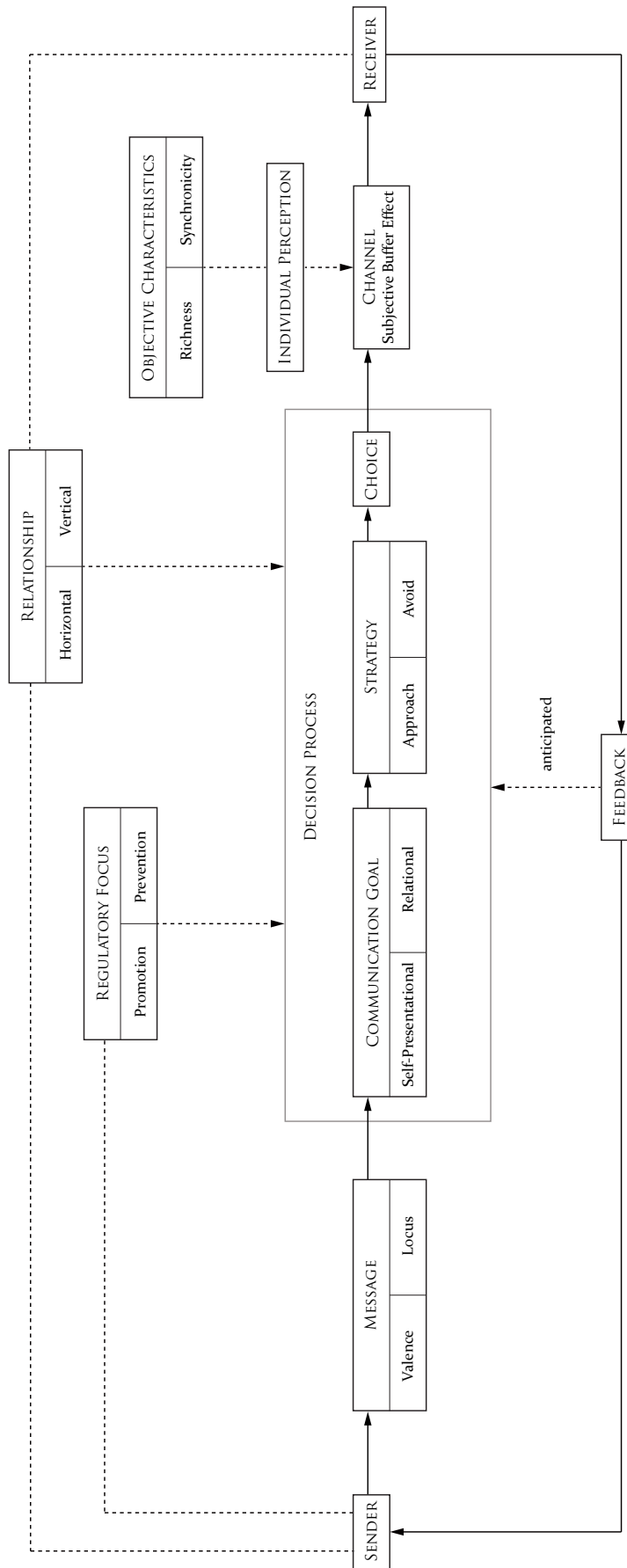
**Figure 2.** Research Model

## *CHANNEL: BUFFER EFFECT*

As indicated above in context of the present approach section, a focus on subjective affordances is the most suited approach to a psychological investigation of communication channels. Again, affordances can be basically thought of as the subjective perceptions of artifacts based on their objective qualities (Chan, 2017). The affordance at the core of this thesis is the *buffer effect* a channel provides, which is defined as a channel's subjective capacity to provide a psychological shield that mitigates emotional exposure and facilitates deliberate disclosure. According to the concept of affordances, the buffer effect is supposed to result from rather objective characteristics on the one hand, but also each individual's perception on the other hand, ultimately rendering it a *subjective* buffer effect.

With regard to the objective characteristics that contribute to a perceived buffer effect, I refer to a basic conception of channel richness and synchronicity (J. R. Carlson & George, 2004). Accordingly, richness is considered as the variety of cues a channel is able to convey, while synchronicity describes the velocity of the back-and-forth a channel allows. In turn, channels are already more or less likely to provide a buffer effect based on their technological features alone. For example, email is a non-verbal and usually less synchronous channel than the telephone and therefore should provide a generally higher buffer effect when averaged over people. However, as the concept of affordances suggests, there is also a subjective component to it, which might lead to differences in perceived buffer effects for one and the same channel between persons. Such different individual perceptions may, for example, be grounded in people's experience with a channel or their general verbal or writing skills (Feaster, 2010). Thus, it seems vital to account for this individual variance in subjective buffer effects when drawing conclusions about the underlying psychological processes that precede channel choices.

The notion that technological channels may psychologically buffer the communication between interactants was considered several times in the literature (Derks & Bakker, 2010; Sussman & Sproull, 1999; Watts, 2007). O'Sullivan (2000) also expected mediated channels to have the "appeal of a buffer effect [...] because it would help insulate the interaction initiator" (p. 414). But these authors only theorized about the effect and mainly attributed it to objective characteristics. Thus, it was rarely explicitly measured (Wotipka, 2016). However, since people may have different perceptions of channels and varying skills in their use (Feaster, 2010), predictions of individual channel choices should be predicated upon the subjective affordances of channels (Fox & McEwan, 2017). Therefore, I implemented a self-report measure within my studies to assess the subjective buffer effect that individuals perceive in

their chosen channels. Although there is a possibility that the subjective buffer effect not only depends on objective characteristics and individual factors but may also vary due to context (e.g., in different relationships or settings), I will focus on the more common approach to consider it as a media affordance that arises from channel features and individual factors (Feaster, 2010). In accordance with this rationale, I implemented study designs where the assessments of channel's subjective buffer effects were conducted towards the end of the study and independent of the various decision situations.

Taken together, this thesis builds on the assumption that people consider the individually perceived buffer effect of different channels when choosing among them, and anticipate how their buffer effect would impact the process and outcomes of an upcoming communication. In turn, they are supposed to choose channels with a lower or higher buffer effect depending on their communication goal in the respective socio-emotional situation. A defining aspect of this socio-emotional situation is the content of the message, which is discussed next.

## *Message: Valence and Locus*

At the core of a basic communication episode, there is a message to transmit. In contrast to communication that serves mainly instrumental goals, this thesis is dedicated to the choice of channels for messages in socio-emotional contexts. In the most basic sense, this comprises messages that are conveyed between individuals and associated with a psychological approach or avoidance tendency (Higgins, 1998; Mehrabian, 1971). In order to investigate choices in response to different contexts, I classify messages within this thesis along two dimensions, valence and locus (O'Sullivan, 2000). Valence describes the positive or negative nature of a message, while locus captures whether the issue focuses on the sender (self-locus) or receiver (other-locus). According to O'Sullivan (2000), prototypical socio-emotional situations are apparent when a sender is about to, for example,

- *confess* (negative|self) a failure or transgression towards the receiver,

- *boost* (positive|self) their image by disclosing an achievement or affection towards the receiver,

- *accuse* (negative|other) the receiver for something they do not approve, or

- *praise* (positive|other) the receiver for an accomplishment or loyal behavior.

Of course, these dichotomies represent an oversimplification of real-life situations. However, they constitute useful representations of the spectrum of socio-emotional content (O'Sullivan, 2000) and are the most frequently reported instances when recalling the transmission of bad news (Dibble & Sharkey, 2017).

Although every social encounter may affect people's face and might therefore possess self-presentational relevance, I generally assume a higher relevance of self-presentational concerns, first, in negative situations since they have a bigger impact on individuals than equally high positive instances (Peeters & Czapinski, 1990; Vaish et al., 2008), and second, in situations that focus on oneself, since self-related experiences are more salient than episodes with a locus on others or third parties (Dibble & Sharkey, 2017). However, apart from those self-presentational goals, relational goals are also more or less immanent to interpersonal communication depending on the respective situation (Canary et al., 2008). Accordingly, people may pursue different goals and corresponding strategies when they go through the process of choosing an appropriate communication channel. Therefore, this decision process is outlined in more detail below.

## DECISION PROCESS: GOAL, STRATEGY, AND CHOICE

### COMMUNICATION GOAL

The understanding of communication channel choices in socio-emotional situations goes hand in hand with knowledge about the psychological decision process behind those choices. Thus, in order to explain and ultimately predict people's channel choices, it seems crucial to explore the situationally-induced intentions sender pursue with them. This is where the impression management model comes into play (O'Sullivan, 2000). One of the key propositions of the model is reflected in the assumption that people are driven by self-presentational concerns and strategically choose channels that they expect to minimize costs and maximize rewards of a communication episode. But, as mentioned before, those costs and rewards are highly dependent on how much weight an individual assigns to different outcomes. For example, self-presentational goals might be better served by vividly experiencing another's positive feedback to achievements (maximize rewards), but people might also be more concerned about not eliciting envy or a feeling of inferiority in the receiver (minimize costs).

While the IMM does not consider potential differences in the focus on costs or rewards, it does account for the possibility that people may also be concerned about their communication partner (O'Sullivan, 2000). Such

a dichotomy of self- and other-concerns in socio-emotional communication is also found in research on the MUM effect (keeping Mum about Undesirable Messages; Rosen & Tesser, 1970). This term is used to capture the psychological reluctance of people to transmit bad news (Dibble, 2014). There are two main explanations in literature for why people hesitate to share such messages, a discomfort and a self-presentational account (Bond & Anderson, 1987): people might either empathize with the receiver and feel discomfort in anticipation, or they fear that delivering the news would lead to an unfavorable impression of themselves. Many studies speak for the latter, i.e., the self-presentational account, though evidence is inconclusive (Dibble, 2018). Regardless of whether the effect is driven by an underlying goal to save face or reduce distress, a channel's buffer effect should provide an effective way to account for both (Sussman & Sproull, 1999).

Although people generally feel reluctant to transmit bad news, pertinent studies on the MUM effect show that they may not shy away from it when it concerns a person close to them (Dibble & Levine, 2013), they are even inclined to share bad news more often (Weenig et al., 2001). Research further indicates that personal outcomes are only a relevant motive when the relationship is superficial, while moral responsibility surpasses the importance of personal outcomes in close relationships (Weenig et al., 2014). This highlights how relationship closeness cannot be disregarded when the conveyance of socio-emotional content is scrutinized and that the IMM, with its inherent focus on self-presentation, could profit from the theoretical integration of relational goals (Canary et al., 2008) and concerns for the relationship itself (Ledbetter & Herbert, 2020).

## STRATEGY & CHOICE

While people may pursue different communication goals, they can also follow different strategies to pursue them. Accordingly, people's goals are *what* they try to achieve, and strategies are *how* they try to achieve them. Although the IMM (O'Sullivan, 2000) subsumes a person's general plan as well as his or her channel choice under the term strategy, research suggests a theoretical distinction between general *strategies* and specific *tactics*, which are the instantiation of strategies in a particular context (Scholer & Higgins, 2008). Accordingly, though they are closely intertwined, my research model theoretically differentiates between strategies and the tactical choices people make (Casadesus-Masanell & Ricart, 2010).

In order to distinguish strategies, a universal distinction of human motivation can be applied: on the one hand, there are approach motives (i.e., to move towards desired end-states), while on the other hand, there are avoidance motives (i.e., to avoid undesired end-states) (Gable, 2006).

Applying this distinction to the present research, such strategic motives are supposed to underly people's tactical choice of communication channels in a given situation. More specifically, the preference for channels with a higher buffer effect is probably associated with such motives. For example, when someone has to confess something, buffering channels might make them feel more at ease with conveying the bad news, since they contribute to avoiding the undesired state of being exposed to the receiver's negative reaction. But on the other hand, such a "buffered" communication process might also impede approaching the desirable state of coming to terms with the receiver. And while the explicit investigation of these underlying strategic concerns is not part of this thesis, the theoretical assumption of different strategies and resulting tactical choices may also provide an explanation for why people might choose different channels in the same contexts. So apart from the proposition that people vary in their perception of buffer effects, I also take into account that they might have different dispositions regarding their preference for certain strategies. This aspect will be outlined further in the next section.

Before that, however, there are some final remarks to be made about the choice of channels. In all the constituent studies of this thesis, people were asked to indicate the channel they would actually choose, not which they would prefer to use. This is especially important if research on the MUM effect is drawn upon in comparison. While people may feel reluctant to share bad news in general, and maybe even more under certain circumstance, they might not always act accordingly (Dibble & Levine, 2013). I assume that there may occur moderating effects of relationship factors. People may, for example, put certain aspects like their moral responsibility over their personal outcomes when they feel particularly close to the receiver (Weenig et al., 2014). Accordingly, people may refrain from choosing channels with a high buffer effect, although their personal preference would suggest otherwise. Those cases, where people's choices differ from what might be expected from an egocentric point-of-view are particularly interesting and can inform theorizing about the underlying psychological processes.

## *Sender: Regulatory Focus*

CMC research has brought to light several traits that are associated with people's communication media preferences and use, like their personality (Hertel et al., 2008), social anxiety (Young & Lo, 2012), or their gender (Kimbrough et al., 2013). In the present research model, regulatory focus can be seen as representative for such factors that are determined by the respective sender and may shape the decision process.

Regulatory focus theory (Higgins, 1998) proposes two motivational systems, promotion and prevention, that regulate people's behavior and are rooted in fundamental human needs. Each of these systems is associated with a different focus on potential outcomes and strategies (Higgins, 2014). While people with a promotion focus are more sensitive to the presence and absence of positive outcomes (i.e., gains and non-gains), those with a prevention focus are more sensitive to the presence and absence of negative outcomes (i.e., losses and non-losses) (Higgins, 2000). Moreover, a dominant promotion focus leads to a preference for eager strategies and approach behavior while a dominant prevention focus, in turn, is associated with a preference for vigilant strategies and avoidance behavior (Crowe & Higgins, 1997). People might have a dominant disposition towards one of the systems or can be high or low at the same time, but which system is predominantly active at a certain moment in time is also affected by contextual factors (Higgins et al., 2020). Taking together the influence of regulatory focus on goal sensitivity and strategic preferences, as well as its susceptibility to contextual factors, the theory seems particularly suited for an application to the current research subject.

Actually, regulatory focus theory has already been shown to provide valid explanations for people's preferences and behaviors in a variety of application areas, like work settings (Lanaj et al., 2012), healthy behaviors (Uskul et al., 2008), and consumer-related contexts (J. Wang & Lee, 2006). For example, prevention-focused individuals concentrate more on safety-related features of a product, while promotion-focused individuals are more interested in comfort-related aspects (Werth & Förster, 2007). Moreover, prevention-focused (vs. promotion-focused) individuals prefer pessimistic over optimistic forecasts (Hazlett et al., 2011) and perceive demanding tasks more as a threat rather than a challenge (Sassenrath et al., 2016). Both tendencies might also transfer to interpersonal communication situations, since they often bear uncertain outcomes and potentially affect the face of people involved – regardless of whether they are positive or negative (Brown & Levinson, 1987). For example, one person might see the conversation about a previous transgression as an opportunity to actively save face in the aftermath, while another would perceive it as even more embarrassing and therefore as an additional face-threat. And even talking good about oneself can indeed boost the own positive image, but it may also make a bad impression if one seems like a boaster. Thus, considering the theoretical propositions and empirical evidence on regulatory focus theory, it seems reasonable to assume that a sender's (situational) regulatory focus may play a role in the process of making a decision between channels of differing buffer effect.

## *RECEIVER: RELATIONSHIP*

Even though the main focus of this thesis lies on the sender's point-of-view, the receiver can apparently not be disregard. A receiving counterpart is integral for dyadic communication and the impact on the receiver as well as the anticipated feedback definitely contribute to a sender's decision process, at least to some degree. Furthermore, the fact who is the respective receiver logically determines the relationship between those involved and defines the relational context of a particular socio-emotional situation. Based on the ideas presented before, that people potentially pursue self-presentational and relational communication goals, who is at the receiving end seems integral to how these goals are prioritized. In order to investigate relationship effects on channel choice, I refer to a basic conception of relationships that builds on two relational dimensions, a horizontal and a vertical one (Bogardus, 1927), which are supposed to affect the salience of relational and self-presentational concerns, respectively.

### HORIZONTAL DIMENSION

An approach that is often applied to conceptualize relationships is that, analogous to spatial proximity, people can feel metaphorically more or less close to each other (Mashek & Aron, 2004). Although there are more elaborate or multi-facetted conceptualizations of relationships in the literature (Dibble et al., 2012; Min et al., 2013; Raven, 2008; Starzyk et al., 2006), I will refer to interpersonal closeness as an intuitive global evaluation that people make of relationship intimacy, which subsumes "social support, trust, mutual understanding, affection, and emotional expressiveness" (Fehr, 2004, p. 20). This suggests that there is basically a unidimensional conception of interpersonal closeness that transcends different kinds of relationships (Dibble et al., 2012). In order to measure this closeness, the present studies apply the Inclusion of Other in the Self (IOS) scale, which has been shown to be a reliable measure with a high validity (Gächter et al., 2015). While mechanisms underlying the influence of closeness on people's decision process are definitely complex, I assume that there is a growing tendency to consider relational communication goals with increasing closeness to the receiver.

### VERTICAL DIMENSION

Apart from this "horizontal" axis to classify relationships, I will also refer to a "vertical" dimension that comprises the concepts of social power, hierarchical status, or dominance (Hall et al., 2005). Similar to closeness, there are various conceptions of this dimension in the literature (Cheng et al., 2014; Raven et al., 1998; Smith & Magee, 2015). Within this thesis, verticality is not defined

as a representation of social class or dominance (in terms of a trait), but as a vertical position explicitly recognized by those involved, like the official rank in a hierarchy (Hall et al., 2015). While other concepts of vertical relationships might have similar influences, status differences between individuals are probably most evident in hierarchical contexts. Depending on the hierarchical status of those involved, self-presentational goals are supposedly more or less salient, since one's impression towards a receiver has more substantial consequences the higher the receiver is ranked. Taken together, the exploration of verticality effects is supposed to complement the still inconclusive knowledge on horizontal closeness effects that is found within MUM effect literature. Both relationship dimensions may substantially impact people's choice of communication channels in socio-emotional situation and thereby conclude this review of the underlying research model.

# Overview of Studies and Publications

The subsequent section provides a summary of the six empirical studies I conducted in my endeavor to further the understanding of communication channel choice in socio-emotional contexts. In its structure, it basically follows the three initially outlined research questions. The six studies are comprised in four papers, of which two are published, a third is in press, and a fourth is yet unpublished. All papers are included in the appendix. Table 1 gives an overview of the allocation of studies and papers to the over-arching research questions. Furthermore, it lists their publication status and involved authors, as well as their individual contribution according to the Contributor Roles Taxonomy (CRediT; Brand et al., 2015). While studies 2.1 and 2.3 as well as studies 2.2 and 2.4 are originally featured in the same paper, respectively, they are split and reordered for better comprehensibility. All research was conducted in accordance with the "Ethical Principles of Psychologists and Code of Conduct" of the American Psychological Association (2021) and study designs were previously reviewed by the faculty's ethics committee.

The following chapter is divided into three subsections, each dedicated to one of the underlying research questions. Within those subsections, the constituent papers are initially stated and each research question is reiterated. Subsequently, each study's background, sample and procedure, as well as its results are summarized. Each subsection then concludes with a joint discussion of the studies' contribution to the bigger picture of this thesis.

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**Table 1.** Overview of shortened research questions, corresponding papers and empirical studies, authors and their contributions, and publication status

| Research Question | Paper | Study | Authors | Contribution | Status |
|---|---|---|---|---|---|
| **RQ1:** Reasons for Channel Choices in Socio-Emotional Communication | Emotion and Interaction Control: A Motive-Based Approach to Media Choice in Socio-Emotional Communication | 1.1 | Stefan Tretter & Sarah Diefenbach | Stefan Tretter: - Conceptualization - Formal Analysis - Investigation - Methodology - Writing – original draft & revision  Sarah Diefenbach: - Supervision - Writing – review & editing | Published Article |
| **RQ2:** Buffer Effect in Channel Choices and the Role of Relationship | The Buffer Effect: Strategic Choice of Communication Media and the Moderating Role of Interpersonal Closeness | 2.1 2.3 | Stefan Tretter & Sarah Diefenbach | Stefan Tretter: - Conceptualization - Formal Analysis - Investigation - Methodology - Writing – original draft & revision  Sarah Diefenbach: - Supervision - Writing – review & editing | In Press |
| | Strategic Self-Presentation through Communication Channel Choice: The Receiver Perspective and the Effect of Hierarchical Status on Sender's Choice | 2.2 2.4 | Stefan Tretter & Sarah Diefenbach | Stefan Tretter: - Conceptualization - Formal Analysis - Investigation - Methodology - Writing – original draft & revision  Sarah Diefenbach: - Supervision - Writing – review & editing | Unpublished Manuscript |
| **RQ3:** Influence of Regulatory Focus on Media Choice and its Manipulation | The Influence of Regulatory Focus on Media Choice in Interpersonal Conflicts | 3.1 | Stefan Tretter & Sarah Diefenbach | Stefan Tretter: - Conceptualization - Formal Analysis - Investigation - Methodology - Writing – original draft & revision  Sarah Diefenbach: - Supervision - Writing – review & editing | Published Article |

# EMPIRICAL STUDIES

## RQ1: REASONS FOR CHANNEL CHOICES IN SOCIO-EMOTIONAL COMMUNICATION

| Study 1.1 | Tretter, S., & Diefenbach, S. (2020). Emotion and Interaction Control: A Motive-Based Approach to Media Choice in Socio-Emotional Communication. *Multimodal Technologies and Interaction, 4*(3), 53. |
|---|---|

Several researchers have previously pointed out that the whole field of CMC research would profit from shifting the focus away from channels themselves to their characteristics and what they provide their users with (Evans et al., 2017; Walther et al., 2005; Westerman et al., 2019). This is crucial to understand why people choose certain channels in varying socio-emotional situations. There have been investigations that gathered reasons for channel choices but they only covered socio-emotional issues peripherally (P. J. Carlson & Davis, 1998), focused on complementary and competitive goals in working contexts (Kayany et al., 1996), or did not provide a systematic structure of channel characteristics and corresponding affordances (Riordan & Kreuz, 2010). Thus, this chapter covers the question:

**RQ1**: Why are people choosing certain communication channels for socio-emotional messages, what are these reasons and how do they correspond to the central differences between channels?

## STUDY 1.1

### BACKGROUND

Study 1.1 gathered open answers on why people would choose a certain channel to communicate different kinds of socio-emotional content. These reasons were systematically clustered into choices that are either based on contextual factors or channel characteristics (and the kind of control they offer). By further classifying these control-related reasons into clusters of self- and other-orientation as well as sending or receiving processes, this examination

yielded a systematic structure of the broad spectrum of considerations that might steer people's channel choices in socio-emotional situations.

## SAMPLE AND PROCEDURE

194 participants (29% male, 70 % female, 1% other) aged 17 to 63 years ($M$ = 28.5, $SD$ = 11.2; $Med$ = 25) were presented with four vignettes that asked them to imagine themselves in a situation where they are about to communicate about a certain topic with another person. These vignettes varied along the two factors of valence (i.e., positive or negative episode) and locus (i.e., issue that pertains to themselves or the receiver). For example, the vignette representing a negative message with a self-locus read as follows:

> *"Think for a minute about a topic, issue, or incident that would undermine how the other person thinks about you. For instance, this could be a discussion about you failing to meet his or her expectations, you doing something morally distasteful, you holding an opinion you know the other person would find repugnant, you being disloyal toward the other person, etc."*
> (adapted from O'Sullivan, 2000, p. 418)

After each vignette they reported the communication channel they would prefer to use and why (choosing from "email", "text message", "instant messaging (IM)/chat", "voice message/voicemail", "telephone", "video chat", or "face-to-face conversation"). Two researchers coded these answers following a dialectical procedure of deductive and inductive content analysis, which led to a final coding of answers with at least good intercoder reliability (Krippendorff's $\alpha$ = .84 - .96).

## SUMMARY OF RESULTS

First of all, an initial quantitative analysis revealed that channel choices did not vary significantly between different vignettes (Fisher's exact test: $p$ = .147), a remarkable observation which will be discussed below. Overall, the study's results indicate that channel choice as a means to control the communication, its process and outcomes, makes up a large portion of reasons that people refer to in socio-emotional situations. These reasons can be divided into two categories of control that are each tied to a certain media characteristic. Accordingly, a sender can exercise interaction control by choosing a channel that is more or less synchronous (i.e., influencing the speed of conversation) and/or emotion control by choosing a channel that is more or less rich (i.e., influencing the variety of transmittable cues). Those ways of control are apparently used with various intentions in mind that can be categorized as

intentionally influencing either the sending or receiving process of either oneself or the other person. Statements from all categories are provided in the corresponding article but two illustrating statements covering each aspect shall be given here. Interaction control over the sending process with a self-focus is represented in "it gives me more time to accurately phrase the message as intended". Emotion control over the receiving process with an other-focus is represented in "it makes it easier for the other to empathize with me".

Apart from these reasons that describe a deliberate choice of channels, two categories emerged that indicate a rather intuitive decision process. These reasons seem to be less tied to the channel characteristics and more to the respective context and its socio-emotional significance. The first class of those reasons comprises pragmatic justifications for choosing a channel, i.e., choices out of convenience or habit. It seems that when an issue is perceived less socio-emotionally significant, it increases the tendency to use a channel that is "more comfortable to use" or simply the person's "favorite channel". On the other hand, there is the class of symbolic reasons that may be associated with episodes of outstanding socio-emotional significance. In those cases, people explain their decision by stating that the respective channel is the only "right" choice in such a situation. Accordingly, symbolic choices are less grounded in certain channel characteristics but in the situation itself and whether a particular choice is deemed socially "appropriate", i.e., it acknowledges the "seriousness of the issue" or "shows personal appreciation".

*Research Contributions*

The presented study constitutes an empirical examination of the variety of reasons (emotion and interaction control, pragmatic and symbolic reasons) that account for people's channel choices in socio-emotional communication and links them to channel characteristics (i.e., synchronicity and richness) but also a situational determinant (i.e., socio-emotional significance). It addresses the initially mentioned gaps in previous research but, beyond that, also delivers a potential explanation to why individual channel choices in particular situations are often hard to predict.

Apparently, while not a central goal of the current study, preferred channels did not vary significantly over the different socio-emotional episodes, although evidence on the impression management model would suggests otherwise (O'Sullivan, 2000). For example, there was no shift towards mediated channels for negative compared to positive messages. This is probably due to people's different perceptions of communication channels on the one hand, and, on the other hand, due to different motives they pursue in

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socio-emotional situations. The study shows two things in that respect: people have the same motives for choosing different channels or choose the same channels out of different motives. For example, one person preferred text messaging to confess something in order to avoid the negative reaction, while another chose face-to-face conversation because that makes it harder for the receiver to react in an extreme and inappropriate manner. Apparently, the same motive to avoid a negative experience led to inherently different channels. Conversely, one person preferred an a-synchronous channel like email for negative issues, because you can edit the wording beforehand, while another, who chose the same channel, did so because it provides the receiver time to unobtrusively process the information. Here, the same channel choice was made out of inherently different motives, one serving the sender, the other serving the receiver.

Although preferred channels did not vary across different episodes, the results are in line with several other propositions of the impression management model (O'Sullivan, 2000), insofar as people have to perceive an episode as (self-presentationally) relevant to choose channels strategically and not based on pragmatic reasons. Furthermore, the data also supports the assumption that the symbolic meaning of a channel can play a vital role in its choice. However, this study also points out weaknesses of the IMM's assumption that communication channels offer a relatively stable degree of interactional control and that their objective characteristics are the appropriate basis for predictions. That is why CMC research should take into account an individuals' perceptions of communication channels and subjective affordances they offer (Feaster, 2010; Fox & McEwan, 2017). The qualitative insights of study 1.1 indicate that people often choose channels with the intention to control the interactional and emotional intensity of the communication. The buffer effect as a subjective affordance captures this capacity of channels and was therefore the key research subject of the quantitative studies outlined in the following. By investigating under which circumstances this subjective buffer effect is reflected in people's choices, conclusions can be drawn about the psychological underpinnings that led to their decisions – and when other motives than to "buffer" the communication might have intervened.

# RQ2: Buffer Effect in Channel Choices and the Role of Relationship

| Study 2.1<br>Study 2.3 | Tretter, S., & Diefenbach, S. (in press). The Buffer Effect: Strategic Choice of Communication Media and the Moderating Role of Interpersonal Closeness. *Journal of Media Psychology*. |
|---|---|
| Study 2.2<br>Study 2.4 | Tretter, S., & Diefenbach, S. (unpublished manuscript). Strategic Self-Presentation through Communication Channel Choice: The Receiver Perspective and the Effect of Hierarchical Status on Sender's Choice. |

The buffer effect describes a channel's subjective capacity to mitigate emotional exposure and facilitate deliberate disclosure, two processes that are likely to support impression management and facework. The notion that communication channels can "buffer" socio-emotional interactions to varying degrees has been brought up a few times in the past (O'Sullivan, 2000; Sussman & Sproull, 1999; Watts, 2007). However, this effect was either not measured, just concluded from channels' characteristics, or assessed but not connected to channel choice (Wotipka, 2016). Moreover, research on the role of relationship in the transmission of socio-emotional messages has yielded inconclusive results (Dibble & Levine, 2013; Johnsen et al., 2014; Weenig et al., 2014). Therefore, this section presents four studies that are dedicated to the question:

**RQ2**: Do people choose communication channels with differing buffer effects depending on the socio-emotional context and which role does the relationship between sender and receiver play therein?

## STUDY 2.1

### BACKGROUND

The first study related to RQ2 employed a design similar to study 1.1 in presenting vignettes and assessing choices, but measured the buffer effect each participant attributed to each available channel. This allowed me to put

the assumption under scrutiny that people choose channels with different buffer effects depending on the socio-emotional content of the message. At the same time, this approach accounted for some limitations in the initial investigation of the IMM (O'Sullivan, 2000) and for many studies' holistic view of communication channels in general (Fox & McEwan, 2017).

## Sample and Procedure

122 participants (31% male, 69% female), aged between 17 and 63 years ($M = 26.9$, $SD = 10.1$; $Med = 24$), were presented with each of the four vignettes (i.e., positive or negative valence; self- or other-locus) in a randomized order. In each situation they rated their affect in the given the situation (to test for vignettes' validity) and chose from the following channels: "email", "text message", "instant messaging (IM)/chat", "voice message/voicemail", "telephone", "video chat", or "face-to-face conversation". After each vignette was passed, participants rated each of the seven channels on a six-item buffer effect scale (adapted from Wotipka, 2016), which yielded acceptable to mainly good internal consistencies (Cronbach's $\alpha$ = .79 - .89).

## Summary of Results

People chose channels with a higher buffer effect in negative compared to positive situations and when the issue primarily revolved around themselves rather than the receiver. This is in line with the theoretical assumption that people's face concerns are higher in negative as well as self-centered situations and that the buffer effect is a means of impression management in order to save face. Remarkably, although their choices were in line with predictions regarding the buffer effects of chosen channels, there was no general shift towards mediated channels in those situations. This may contradict the empirical observations made by O'Sullivan (2000), but supports the theoretical consideration that people incorporate channels' buffer effects into their decision process.

This initial study also served as a means to explore the presumed nature of the buffer effect as an affordance. As laid out in the theoretical discussion of the research model, there is a rather objective component that stems from the characteristics of a channel (e.g., richness, synchronicity), as well as a subjective component, that results from an individual's perception of a channel and the ability to utilize these features in social communication (Chan, 2017; Feaster, 2010). The average subjective buffer effect scores that were observed within the sample are in line with this assumption regarding objective characteristics, since they tend to decline for channels that are considered richer and more synchronous. But such an objective classification at face value is apparently not sufficient, since channel choices themselves (in

terms of choice frequencies) were not consistent with observations from earlier works (O'Sullivan, 2000). What was consistent with the proposed predictions, however, were the differences in buffer effects that people established with their choices. They did actually choose channels that provided a higher buffer effect to them in negative and self-locus situations. Apparently, it is vital to consider the buffer effect a specific person perceives in a particular channel, instead of only comparing channels objectively, which corroborates the present approach (note: the assumption that the buffer effect partly emerges from media features but also includes a substantial individual proportion is also supported by a moderate correlation of objective characteristics and subjective buffer effects in study 3.1).

## STUDY 2.2

### BACKGROUND

The study design was identical to that of study 2.1 but changed perspective from sender to receiver in order to validate the study design and uncover potential discrepancies. This would reveal if receivers show the same preferences for buffer effects as senders or if they follow a different agenda. Specifically, the assumption was that receivers also prefer higher buffer effects when being contacted about negative (vs. positive) messages. But moreover, they were supposed to show the same tendency when the issue focused on themselves (vs. the other). This would indicate that people show the same self-presentational concerns regardless of whether they are at the sending or receiving end.

### SAMPLE AND PROCEDURE

139 participants (53% male, 46% female, 1% other) with an average age of 34 years ($M$ = 34.0, $SD$ = 12.8; $Med$ = 30) received the four vignettes in a randomized order but imagined they were the receiver in the given situation and that the other person was about to get in contact with them about the issue. Subsequently, they were asked to choose that channel out of the seven available options that they would prefer the sender to choose. After each scenario was passed, they finally filled out the buffer effect scales for all the channels they chose before, which again yielded acceptable to mostly good internal consistencies (Cronbach's $\alpha$ = .77 - .88).

### SUMMARY OF RESULTS

Receivers showed the same preferences as senders regarding the message's valence, i.e., they wanted the sender to choose a communication channel with a higher buffer effect in negative compared to positive situations. Likewise in

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accordance with the expectations, their preferences were not in line with those of senders regarding the locus of the issue. Receivers preferred channels with a higher buffer in the other-locus compared to the self-locus scenarios (from the sender's perspective), i.e., in situations in which they as receivers were the center of the issue. This is in line with choices they would have made if they themselves had been the senders, as study 2.1 demonstrated. Accordingly, both sides show preferences for buffer effects if the issue focuses on themselves. Thus, results indicate that if their own face is affected, people prefer face-saving channels more than if the other's face is affected. This may hint towards potential incompatibilities between sender and receiver preferences that might ultimately harbor conflicts.

## STUDY 2.3

### BACKGROUND

Study 2.3 further built on the paradigm previously introduced but with the substantial extension that a manipulation of sender-receiver relationship was integrated. While former research is inconclusive on potential effects, the present study presumed a moderating effect on people's tendency to choose channels with a higher buffer effect due to a change in communication goals that interpersonal closeness may evoke.

### SAMPLE AND PROCEDURE

The study's final sample consisted of 90 participants (52% male, 48% female), aged between 18 and 68 years ($M$ = 33.7, $SD$ = 12.4; $Med$ = 30), that were all described the four socio-emotional situations, chose their respective communication channel and rated the buffer effect of the chosen channels afterwards (Cronbach's $\alpha$ = .78 - .92). However, they were initially subdivided into two sets of different relationship conditions. Participants were either asked to imagine the following situations with one of their close friends or with an acquaintance of theirs, and stick to this person throughout the study. They were subsequently given the Inclusion of Other in the Self Scale (Aron et al., 1992; Gächter et al., 2015) to control for manipulation success and continued with the established procedure.

### SUMMARY OF RESULTS

In the acquaintance condition, people chose channels with a higher buffer effect for negative compared to positive messages, replicating the effect of valence from study 2.1. In the friend condition, however, this effect inverted, so that people actually chose a lower buffer effect for negative episodes. In

contrast to study 2.1, locus effects were not observed. There was no difference depending on whether the issue centered on oneself or the other, regardless of interpersonal closeness. While the absent locus effects were contrary to expectation, the supported interaction between valence and relationship indicates that people refrain from the self-presentational tendencies they express in more superficial relationships when the receivers are close others.

## STUDY 2.4

### BACKGROUND

The fourth study of RQ2 was conducted to further contribute to the understanding of relationship effects in channel choice. Instead of manipulating interpersonal closeness, a "horizontal" relationship dimension, the "vertical" dimension of hierarchical status was varied. This was implemented by applying the established study paradigm to a workplace context where hierarchical relationships are particularly salient.

### SAMPLE AND PROCEDURE

68 participants (35% male, 63% female, 2% other) between the age of 17 and 63 ($M$ = 25.2, $SD$ = 9.5; $Med$ = 21) were recruited and each presented six vignettes. The described scenarios resembled those of the former studies and varied between valence (positive vs. negative) and hierarchical relation in a workplace setting (subordinate vs. colleague vs. superior). For example, the vignette representing a positive message to a superior read as follows:

> *"Imagine a situation in which you are about to communicate something to your superior. It should be a topic, issue, or incident that would put you in a good light. For example, it could be about you having achieved an extraordinary performance, you having something great to report, you having solved a particular problem, etc."*

Again, participants indicated the channel they would choose in the respective situation and rated the subjective buffer effect of these channels after all six scenarios were passed. Internal consistencies were acceptable to good (Cronbach's $\alpha$ = .78 - .88), except for "email" ($\alpha$ = .638). Since single item exclusion would have led to no significant improvement, the original scale was maintained for the sake of consistency among channels.

SUMMARY OF RESULTS

This study yielded an expected interaction effect between hierarchical status and valence of the message. People chose communication channels with a higher buffer effect in negative compared to positive situations – but only if the receiver was on the same or higher hierarchical level as them. There was no significant difference between positive and negative messages in the communication with subordinates. This may be grounded in higher face concerns when one is about to confess something to a fellow colleague or supervisor, while one has to fear less consequences or may be less inclined to manage impression towards a subordinate. Presumably, people are less eager to pursue self-presentational goals with lower status individuals and make their choices based on other premises, like being genuine, or simply out of pragmatic reasons.

## RESEARCH CONTRIBUTIONS

The previously outlined set of studies 2.1 – 2.4 demonstrated that people choose channels with varying buffer effects based on the socio-emotional context and the relationship with the receiver. Since people perceive channels differently, a focus on these subjective affordances seems more reliable than propositions about concrete channel choices. Apparently, results did not support previous observations that negative compared to positive messages lead to a generally stronger preference for mediated channels as a whole (O'Sullivan, 2000). However, they were in line with theoretical considerations on the underlying preference for a psychological buffer. Furthermore, if people do not make their choices in accordance with an expected preference for buffer effects, like shown here for different relationships, these discrepancies can substantially inform theorizing about the underlying communication goals.

Concretely, I was able to show that people choose channels with a higher buffer in negative situations. This is line with the proposition that a buffer effect attenuates emotional exposure and facilitates deliberate disclosure and is therefore strategically used for impression management in face-threatening situations. However, people only acted like that as long as their receivers were not interpersonally close to them. This may be attributed to a shift in communication goals. The buffer effect serves well in the pursue of self-presentational goals, may they be egocentrically motivated or in favor of the recipient. However, in close relationships, self-presentational goals, like the saving of face out of embarrassment or politeness, might lose relevance and relational goals could come to the fore (Dibble & Levine, 2013; Schlenker, 1980).

This is in line with recent evidence on the IMM that suggests that mutual – instead of self or other – face concerns are the best predictor for channel preferences in conflicts between close individuals (Ledbetter & Herbert, 2020). It indicates that concern for both communication partners and the image of the relationship increasingly determine channel preferences in close relationships. It may be that when people choose channels with a lower buffer effect in negative situations, they enable a genuine communication to take place and thereby also convey a symbolic meaning (Westerman & Westerman, 2010). This is in line with study 1.1, which suggests that people tend to choose channels out of symbolic reasons when the situation is considered highly significant. This should occur sooner in relationships that people hold dear. On the other hand, this is also congruent with the IMM's proposition that symbolic meaning is one potential determinant of channel choice (O'Sullivan, 2000). However, the model makes no further propositions about when and how this factor comes into play. The present studies contribute to this by examining the influence of interpersonal closeness.

Apart from interpersonal closeness, study 2.4 also explored relationships of different hierarchical status between the interactants. The tendency to choose channels with a higher buffer effect for negative messages appeared to vanish when people were communicating with their subordinates. Maybe, since the workplace is usually no place for close relationships, people's choices are mainly driven by the pursue of self-presentational goals, which are less salient when the receiver is hierarchically situated below them. Since most work relationships could be classified as acquaintances (i.e., low interpersonal closeness), but different results were obtained depending on the kind of hierarchical status, there might also be a vertical "hierarchical status" axis next to the horizontal "interpersonal closeness" dimension that influences buffer effect tendencies in channel choices.

The presented studies answered the underlying research question if people choose channels with different buffer effect in varying socio-emotional situations. Furthermore, the results emphasize the importance of incorporating relationship variables into theories of strategic channel choice. Relationships obviously have a moderating influence that can lead to substantially different channel choices, which might, in turn, affect communication outcomes. However, if we wanted to nudge people towards favorable channel choices in real-life situations, manipulating the relationship between sender and receiver would be no feasible option. To the best of my knowledge, there is little to no research in the field of CMC, how channel choices could be influenced without changing anything about the cornerstones of the communication situation. The following section is dedicated to the exploration of such an intervention.

# RQ3: Influence of Regulatory Focus on Media Choice and its Manipulation

| Study 3.1 | Tretter, S., & Diefenbach, S. (2021). The Influence of Regulatory Focus on Media Choice in Interpersonal Conflicts. *Psych, 3*(1), 1-17. |
| --- | --- |

CMC research has uncovered several factors that may affect channel preferences. Some of them are more consistent, like a sender's personality (Hertel et al., 2008) or the relationship with a receiver (Johnsen et al., 2014), others more situational, like channel accessibility (P. J. Carlson & Davis, 1998) or message characteristics (Westerman et al., 2019). However, there is hardly any knowledge on how to influence channel choice without changing anything about the situation itself (i.e., sender, message, channel, or receiver). Interpersonal conflicts constitute an appropriate subject to investigate intentionally influenced channel choices since they are the most common stressors in daily life and potentially detrimental to the well-being of those involved. Whether one establishes a psychological buffer through channel choice in a conflict situation is also a question of whether to avoid or approach the confrontation. Such behavioral approach and avoidance tendencies have already been associated with people's regulatory focus in previous research. Studies have shown that their regulatory focus shapes people's perception and preferences in uncertain situations (Appelt & Higgins, 2010; Hazlett et al., 2011; Rodrigues et al., 2019; Sassenrath et al., 2016). More specifically, a promotion (vs. prevention) focus may foster conflict resolution strategies more than conflict avoidance strategies (Rodrigues et al., 2019). Accordingly, the situationally induced activation of a certain regulatory focus may constitute a lever to intentionally impact channel choice. Thus, this section covers the research question:

**RQ3**: How does regulatory focus influence communication channel choice in interpersonal conflicts and can its manipulation change choice behavior?

## Study 3.1

### Background

This study applied the theoretical propositions of regulatory focus theory to the subject of channel choice in interpersonal conflicts. The underlying assumption was that people's tendencies in media choice differ depending on whether they were in a currently dominant promotion or prevention focus, since regulatory focus shapes preferences for strategies and perception of outcomes. For example, a prevention focus could cause people to be more sensitive to the potential face-threat posed by conflicts and they might thus prefer vigilant strategies like choosing channels with a higher buffer effect. Since regulatory focus can be situationally induced, a demonstrated effect could serve as a starting point to develop ways of influencing media choice in socio-emotional situations, where well-being and relationships are at stake.

### Sample and Procedure

80 participants (59% male, 40% female, 1% other) made the final sample with an average age of 36 years ($M$ = 35.5, $SD$ = 11.5; $Med$ = 33). First, people filled out the German Regulatory Focus Questionnaire (Schmalbach et al., 2017), so that later analyses could control for dispositional differences in chronic regulatory focus. Afterwards, people were given a short task that was disguised as a test of their engagement in the study. This task was actually used to induce a situationally dominant promotion or prevention focus, similar to other manipulations in the regulatory focus literature. People were either prompted to write down one of their current hopes/ideals (promotion condition) or duties/obligations (prevention condition) and three ways how they intend to pursue them. Then, they were asked to imagine themselves in a potential conflict situation that was described in a similar manner to previous studies:

*"Imagine a situation, in which you are about to communicate with another person. This should be about an issue that could lead to a conflict between you and this person. This potential conflict could result from you having different opinions about a topic, you doing something the other person considers unacceptable, or you having critique, that might hurt the other person. Please shortly describe the concrete situation that you are imagining."*

People indicated which kind of channel they would choose to communicate about the conflictual content out of the following options: "written and not synchronous (e.g., email, SMS)", "written and synchronous (e.g., chat, instant messenger)", "spoken and not synchronous (e.g., voice message, voicemail)",

or "spoken and synchronous (e.g., telephone)". Additionally, they rated the closeness of their relationships with the receiver on the Inclusion of Other in the Self Scale (Aron et al., 1992; Gächter et al., 2015). Analogously to the previous studies, participants rated their chosen channels on the six-item buffer effect scale. Three of the four channels showed acceptable internal consistencies for subjective buffer effect scores (Cronbach's $\alpha$ = .73 - .78). For speech-based, a-synchronous media, internal consistency was only at $\alpha$ = .65, but all items were retained for the sake of consistency across channel assessments.

## SUMMARY OF RESULTS

In line with the hypothesized effects, participants with a situationally induced prevention focus chose channels with a higher buffer effect than those who encountered a promotion focus induction. Furthermore, a similar effect was demonstrated regarding the actual channel choices. People in a prevention focus had a higher probability of choosing leaner options, i.e., choosing channels that were written rather than spoken and delayed rather than synchronous. Those reported effects still held true if analyses controlled for people's chronic regulatory focus and the interpersonal closeness to the receiver. On a side note, an exploratory analysis of the association between channel rank (in terms of richness) and buffer effect score yielded a moderate correlation. This indicates that there is an interplay of objective media characteristics and subjective buffer effect, but not enough conceptual overlap to disregard individual variation in channel perception (especially in the light of previously presented studies).

## *RESEARCH CONTRIBUTIONS*

The core contribution of this study is twofold, with a primarily theoretical and a more practical implication. On the one hand, regulatory focus theory has been applied to a number of different research subjects from basic human motivation to differences in work or consumer behavior. The present study demonstrated its applicability to yet another area, thereby supporting the theory's general value while informing research in the field of CMC. On the other hand, it also extends applied research by pointing out a means to nudge people's channel choices towards a (presumably beneficial) direction. Research on media choice can be distinguished along two questions: What channels should people choose when, in order to achieve best outcomes? And what channels do people actually choose and why? Ways to intentionally influence channel choice could bring these two lines together by supporting people in actually preferring those channels that are best for

their current goal. Regulatory focus induction might be one way to achieve this in socio-emotional communication situations. Further thoughts on how such implementations might look like can be found in the corresponding publication as well as in the discussion of practical implications below.

Regarding the theoretical context of this work, this study adds to the understanding of psychological mechanisms underlying channel choice. Socio-emotional communication, and interpersonal conflicts in particular, are potentially affecting the face of those involved. The buffer effect of channels can serve as a means to cope with these face-concerns. By buffering the conversation, people might seek to satisfy a dominant motive to prevent unpleasant experiences and avoid direct confrontation. On the other hand, channels with a lower buffer effect may provide the opportunity to better resolve a conflict or at least symbolize this willingness instead of avoiding the issue. The present results reveal that people show different preferences depending on the activated regulatory focus. This is in line with the assumption that approach and avoidance motives influence the appeal of buffer effects and, in turn, media choice. In sum, this study backs the theoretical considerations of this thesis and points out a way to push channel choices towards a certain direction. What the optimal choice in a given situation would be, however, is subject to other investigations in the field of CMC research.

# GENERAL DISCUSSION

Some messages are harder to convey than others. Everyone knows the feeling of ruminating over how to appropriately disclose negative news, how it will feel like, how the other might react and what consequences might arise. On the other hand, there is news we feel we cannot even wait to share and would volunteer to deliver. This thesis is dedicated to such situations and how people strategically choose between the broad spectrum of communication channels at their hand. While CMC research extensively studies the uses and effects of media, approaches that take into account specific situations and the psychological drivers behind strategic choices are comparatively rare (O'Sullivan & Flanagin, 2003). I conducted the present studies in order to shed light onto this decision-making progress and corresponding choices people make to deal with their concerns in socio-emotional situations. Over time, communication technologies may emerge, then prosper or fade, as much as we might adapt or change our ways of use, but what will definitely stay the same are the principal needs, motives and goals people pursue in the communication with each other. This is how psychology can contribute to the study of computer-mediated communication and why this work shifted perspective away from the arguably objective characteristics that might define different channels towards how each individual perceives and utilizes them.

## SUMMARY OF RESEARCH FINDINGS

The research process outlined here basically aimed at three central questions. Which reasons underly the choice of communication channels in socio-emotional contexts? How do choices vary between different contexts? And how could these choices be influenced without changing the context? The first question on why people chose communication channels was addressed in a mainly qualitative exploration of reasons people report to justify their decision (RQ1). This led to three sets of categories that can be described as pragmatic, control-based and symbolic reasons. Those reasons seem to vary in the degree of consideration that takes place during the decision process and the margin of freedom people perceive to have in their potential choices. Pragmatic reasons comprise choices out of convenience or habit that are characterized by a rather straightforward decision process. In situations that are not perceived as particularly significant, people think about what is the easiest or most comfortable way to communicate and go for that. Control-

based reasons are underlying choices aimed at emotion and interaction control and apparently gain importance as soon as situations are perceived to possess a certain socio-emotional relevance. They are of a more deliberate nature and take into account the implications that richness and synchronicity might have for the conveyance of messages and the experience of communication as a whole. Here, people's reasons are naturally manifold but can be further classified as focusing on oneself or the other and as influencing the sending or receiving process. Symbolic reasons, in turn, are apparently characterized by social norms and the symbolic meaning channels hold. People are quite convinced that there is a certain choice that imposes itself in a given situations and that this channel is the only "right" way to communicate.

The second question on how the context shapes channel choices was under scrutiny in several studies (RQ2). Those studies built on the buffer effect of communication channels, which is supposed to emerge from the emotion and interaction control a channel provides and their individual perception. It is defined as the subjective capacity to establish a psychological shield that mitigates emotional exposure and facilitates deliberate disclosure. The presented research demonstrated that people choose channels with a higher buffer effect to communicate about negative (vs. positive) issues and when the issue focuses on themselves (vs. the receiver). I attribute this to increased self-presentational concerns. Accordingly, people choose channels with a higher buffer effect since they support impression management strategies in an effort to maintain face. A complementary study showed that receivers' preferences also follow this rationale, which results in a preference for channels with a higher buffer effect in negative situations. Moreover, receivers as well as senders seem to prefer channels with higher buffer effects when the communication episode focuses on themselves, which underlines the assumed relevance of self-presentational goals.

Remarkably, an investigation of different kinds of relationships yielded a moderating effect of interpersonal closeness. While the previously stated effects of socio-emotional context on channel choices held true in distant relationships, there was an inverted effect in close relationships, i.e., senders chose channels with a lower buffer effect in negative situations. This shift may occur due to the increased salience of relational goals at the expense of self-presentational goals: on the one hand, there is probably less room for favorable self-presentation if people know each other very well. On the other hand, it seems more difficult to save or foster a relationship if the channel "buffers" the communication process. Additionally, in close relationships, people might also be more inclined to choose such channels out of symbolic reasons because they signal a certain relationship strength and show appreciation. Another study on channel choices in a working

context provided additional insights regarding the relevance of relational factors. Here, people also chose channels with a higher buffer effect for negative messages but only as long as the receiver had the same or higher status. The difference between positive and negative messages was no longer present when lower status individuals were at the receiving end. This may be attributed to a lower salience of self-presentational goals in downward communication, with other reasons coming to the fore, like simple pragmatic considerations or the intention to come to terms with a subordinate.

The third question on how channel choices could be influenced without changing the contextual cornerstones was addressed by applying regulatory focus theory to conflict situations (RQ3). Interpersonal conflicts are instances of uncertain outcomes and the choice of communication channels with higher buffer effects could be understood as the manifestation of a vigilant avoidance strategy. According to regulatory focus theory, people increasingly tend towards such avoiding behaviors when they are in a prevention focus. In line with these premises, people with an induced prevention focus (instead of promotion focus) were shown to choose leaner channels and communication media with a higher subjective buffer effect for messages with conflict potential. Hence, the proposed assumption that situational regulatory focus can affect channel choice was supported. This effect still remained even when analyses controlled for people's chronic regulatory focus and their relationship with the receiver. And since people were experimentally induced with a certain focus, this investigation gives answer to the question of whether people's channel choice behavior can be intentionally nudged towards certain directions.

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## THEORETICAL CONTRIBUTIONS

While specific contributions and implications are discussed in more detail in the appended manuscripts, I will elaborate here on how to integrate these reported insights into the current research, beginning with the inherent theoretical differences to many prevalent theories. Subsequently, I will revisit the impression management model and lay out how my studies contribute to each of its three central stages (i.e., perception of the episode, formulation of communication goal, formulation of interactional strategy), before adding some remarks on the methodological approach.

As mentioned before, the field of communication research is characterized by a myriad of media theories, but two of the most prominent ones are media richness (Daft & Lengel, 1986) and media synchronicity theory (Dennis & Valacich, 1999). These theories have been drawn upon countless

times, but they were not consistently able to predict media choices for a simple reason – this is not what they were intended to be used for. They are performance theories, proposing not how people actually choose but what choices are most effective for the achievement of instrumental goals (Dennis et al., 2008). Actually, while users might even advocate for media richness as the reason underlying their decision, their choices may still be primarily grounded in affective motivations (Otondo et al., 2008) or they do not even act according to their stated beliefs (Markus, 1994). Of course, there are also other theories concerned with socio-emotional factors and interpersonal relations. But those are either treating channel affordances as objective characteristics (like social presence theory; Short et al., 1976) or are primarily concerned with the general uses and gratifications of certain media rather than context-dependent choices between channels (Sundar & Limperos, 2013; Walther, 2011). Admittedly, general usage patterns might be thought of as the sum of many single media choices, but specific media choices are influenced by more situation-specific variables that have to be conceptualized and measured accordingly (Trevino et al., 2000).

In response to these shortcomings and in an attempt to not further theory proliferation but to refine existing approaches, I applied the impression management model (O'Sullivan, 2000) as a framework to investigate the strategic choice of channels for socio-emotional content. Peripherally, the model considers sender's and receiver's self-concept as antecedents and proposes a posterior evaluation of the episode and relationship. But at the core, the IMM describes strategic channel choice as a result of perceiving an episode as self-presentationally relevant in some way. From there on a communication goal is formulated and subsequently a strategy, and corresponding channel, is chosen. Apart from the concrete insights and conclusions of the presented studies per se, they also provide a substantial theoretical contribution to these three stages of the IMM that are outlined in the following. Figure 3 is an attempt to display those potential extensions to the core of the IMM.

Study 1.1 supported the IMM's proposition that an episode has to exceed a certain threshold of self-presentational relevance to even enter a strategic channel choice process. Although people were presented vignettes intended to illustrate a substantial socio-emotional situation, they still occasionally reported pragmatic reasons for their choice (in the upper one-digit percentage range), apparently not even considering a communication goal that transcends convenient information transmission (P. J. Carlson & Davis, 1998). Accordingly, this indicates that if there is a lack of perceived relevance, the next stage is not even entered and people make pragmatic choices (study 1.1). Even more importantly, the IMM only proposes valence
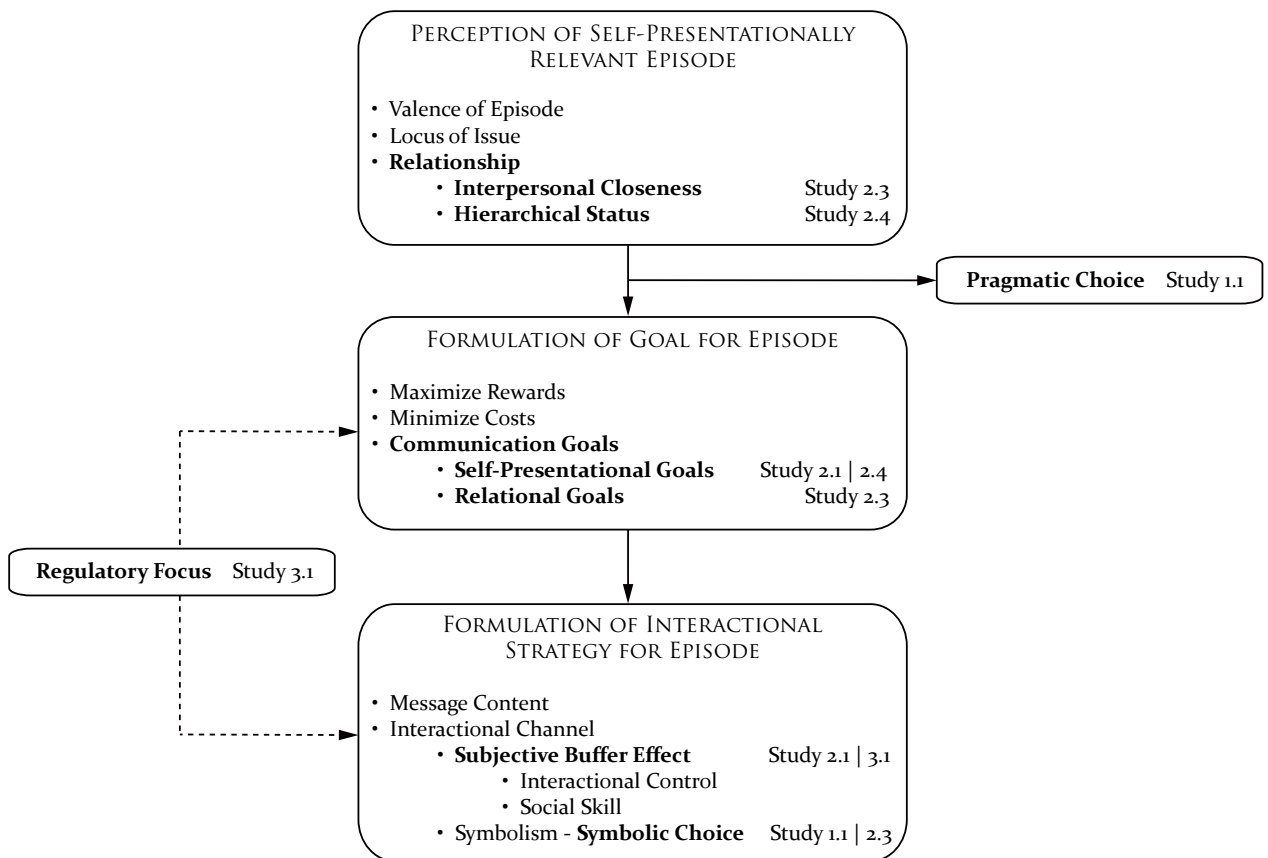
**Figure 3.** Core components of the IMM (O'Sullivan, 2000) with current contributions

and locus to define the relevance of the episode. However, studies 2.3 and 2.4 suggest that also horizontal and vertical characteristics of the relationship are defining the importance of an episode and whether people are more concerned about its impact on individuals' or the mutual face, i.e., the image of the relationship (Ledbetter & Herbert, 2020).

These varying face concerns are also reflected in the next IMM stage of formulating a communication goal. The present work adds to this stage by delivering indications that relational goals can overcome self-presentational concerns in close relationships (study 2.3). Furthermore, the model proposes that a sender's goal is basically trying to maximize rewards and minimize costs of the communication. However, there are differences in how people construe costs and rewards. For example, people in a prevention focus might perceive things not getting worse as a success, whereas promotion-focused people would consider this a failure (Higgins et al., 2020). Study 3.1 demonstrated that regulatory focus plays a role in channel choice and, generally, it has been shown to influence how people perceive potential outcomes, i.e., how they value (non-)gains and (non-)losses. This asks for a more fine-grained definition of anticipated costs and rewards.

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Also, study 3.1 further adds to the next stage of the IMM, which is formulating an interactional strategy. Regulatory focus is also shaping people's preferences for eager, approaching or vigilant, avoiding strategies (Scholer & Higgins, 2008), which is reflected here in the tactical choice of different channels due to regulatory focus induction. Beyond that, the "interactional strategy stage" subsumes the adaption of message content and the choice of interactional channel, which in turn comprises interactional control, social skills and symbolism. Studies 2.1 - 3.1 focused on the subjective buffer effect as a combination of interactional control and social skills, since the subjective affordances of a channel are always also a result of its user's ability to handle them (Feaster, 2010). The relevance of the third aspect, symbolism, was also supported by study 1.1 as well as earlier works that emphasized symbolic meaning (Trevino et al., 1987) and that the medium sends a message in itself (McLuhan, 2010). Moreover, study 1.1 and 2.3 provide indications on when channels are chosen due to their symbolic meaning instead of control aspects: when the relevance of the episode is considered particularly high and/or when the relationship between sender and receiver determines a certain (appropriate) channel choice. Taken together, this thesis contributes to the theoretical model in several regards that might extend its application from a solely self-presentational impression management model to a socio-emotional relationship management model of strategic channel choice.

On a more abstract level, while limitations are discussed further below, I would like to briefly emphasize certain strengths of the methodological approach behind this thesis. First of all, there is the combination of insights drawn from qualitative and quantitative inquiries. While research in the field of CMC does not lack qualitative investigations, their main focus is often on media characteristics or use behavior and less on channel choice and its contextual determinants, with occasional exceptions (P. J. Carlson & Davis, 1998; Kayany et al., 1996; Trevino et al., 1987). Accordingly, such qualitative studies with an emphasis on socio-emotional situations are even rarer (Riordan & Kreuz, 2010). Moreover, quantitative research often treated CMC in a monolithic fashion or compared channels as distinct entities (Johnsen et al., 2014; O'Sullivan, 2000; Rice & Love, 1987), instead of focusing on their variance along common characteristics and affordances (Fox & McEwan, 2017; Westerman et al., 2019; Westerman & Westerman, 2013). I started from there and built on the insights from a qualitative study, identifying what appeared to be a promising subject of psychological examination, i.e., the buffer effect. Subsequently, I applied the same (or similar) study paradigm in order to follow a coherent approach and further scrutinize the contextual determinants of this subjective affordance. While it might have seemed idiosyncratic at times

to work with the buffer effect people associate with their choice instead of focusing on choice itself, observations from several studies underlined the appropriateness of this approach. People's actual choices were only occasionally in line with what the impression management model would have implied. But they were mostly congruent with the basic theoretical rationale if the individually perceived buffer effect was considered. This focus on a more psychological variable holds value in two respects. First, it allowed to provide a deeper insight into the self-presentational concerns that drive people's channel choice and when contextual changes interfere with those considerations. Second, it offers a sustainable approach that can be applied to future technological developments in the field of communication media. Because, as Scott (2009) pointed out, "we can't keep up with new innovations, so we need theory and models that can" (p. 754). This thesis represents an effort to contribute to this endeavor.

## Practical Implications

Apart from the theoretical contribution of this thesis, the delivered insights also yield at least two lines of practical implications. The first is mainly user-centered. I will point out some ways to support the need for a psychological buffer that senders apparently demonstrated with their channel choices. The second pertains to communication itself. Instead of supporting preferences for a psychological buffer, this aims at fostering channel choices that are beneficial for both sides and their interpersonal exchange. Without digressing too much from the scope of this work, I will outline some exemplary ideas on how this may be implemented in the design of communication technologies. While some of them may be applicable to positive as well as negative messages, I will focus on the delivery of bad news since they have been shown to be of greater significance here and elsewhere (Bies, 2013; Derks & Bakker, 2010; Sussman & Sproull, 1999).

People's reluctance to convey bad news is a well-documented phenomenon in pertinent literature (Bond & Anderson, 1987; Dibble, 2018; Tesser & Rosen, 1975). This can lead as far as people not delivering negative messages at all, leaving out crucial information, or sugarcoating the content (Sussman & Sproull, 1999). However, since negative episodes like conflicts are not inherently bad but can also lead to a deeper understanding of oneself and the affected relationship (Jensen-Campbell & Graziano, 2001), such distortions may not be conducive in the long run. Since channels that buffer the communication apparently help people to share negative content and be more

accurate and honest (Sussman & Sproull, 1999), communication could even profit from enhancing subjective buffer effects. Accordingly, characteristics of channels might be tailored in a way that they address the desire for emotion and interaction control. For example, messaging applications that show when someone is currently writing or has read the last message, strip the user of interaction control, since it increases subjective time pressure and exacerbates a deliberate choice of words. The option to (situationally) disable those functions could thus be more than welcome (Blabst & Diefenbach, 2017). In this regard, voicemails, for example, can be considered a good compromise, since they allow for repeated recordings (i.e., supporting the deliberate choice of words) but simultaneously enable the use of paraverbal cues to transmit emotional nuance. Similar ambitions are also represented in more innovative communication technologies that, for instance, capture facial expressions and turn them into abstract representations for the recipient (S.-P. Wang et al., 2014). This allows senders to veil their face but without suppressing every facial expression at all. Since interaction control is associated with positive communication experiences (Feaster, 2013), addressing the concerns displayed in the present research might contribute to individuals' well-being in their use of communication media.

However, supporting senders' preferences for buffer effects might also come with disadvantages. People have been shown to be unreliable in the detection of emotions via text-based channels (Laubert & Parlamis, 2019), might perceive them more negative than intended (Byron, 2008; Watts, 2007), or can be overconfident in their ability to transmit and interpret affect (Riordan & Trichtinger, 2017). A potential way to avoid such detrimental channel choices could be to create awareness about how a message might affect the receiver. An example for such a technological implementation can be found in the prototype of a communication system that processes messages beforehand and mirrors a recipient's predicted reaction to the sender (David & Katz, 2016). However, this a priori feedback might as well even increase senders' discomfort and therefore the intention to buffer the experience. Another approach could be to establish a stronger sense of interpersonal closeness to the receiver (Dibble & Levine, 2013), which might lead to channel choices with lower buffer effects due to the increased salience of relational goals (study 2.3). There are several examples in literature that explored technical ways to establish relatedness, which might be more or less suited to be transferred to communication technologies (Culén et al., 2019; Hassenzahl et al., 2012; Nakanishi et al., 2014). Another possibility to influence channel choices was at the core of one of the studies presented before (study 3.1), namely the manipulation of regulatory focus. There are quite a few ways to induce regulatory focus through experimental tasks, but taking the thought one step further, avoidance or approach motivation might be elicited

through design features. Elements like color (Mehta & Zhu, 2009) or shape (Bar & Neta, 2007) have been shown to affect people's regulatory focus and strategic orientation (Dries-Tönnies et al., 2015). Communication technologies can be imagined that are designed to adapt their displays accordingly. Of course, the presented thoughts and examples for practical implications might seem bold and unorthodox, but they outline potential approaches for CMC research to integrate psychological insights into the design of communication channels.

## LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

While most of the limitations concerning the conducted studies are discussed in the respective manuscripts, there are some constraints that transcend the constituent works. At the same time, I want to point out some directions for future research that can add to the subjects under scrutiny here.

First, much of the present reasoning about underlying motives, strategies and goals is concluded from observations but not directly assessed. Of course, these considerations are grounded in solid theories and empirical evidence reported here and elsewhere, but whether or not the proposed individual concerns were actually responsible is open to further inquiry. Future research could inform the understanding of channel choice processes by combining the impression management model with another renowned theory on face concerns, that is face-negotiation theory (Ledbetter & Herbert, 2020; Oetzel et al., 2003; Ting-Toomey, 2004). The culture-based face-negotiation theory integrates three kinds of face locus, i.e., self-face, other-face and mutual-face (Ting-Toomey, 2005), and connects concerns about them to facework strategies like avoiding, integrating, and dominating (Oetzel et al., 2008). For example, people from collectivistic cultures construe their self more interdependently than those from individualistic cultures and are therefore more concerned about saving others' faces. In turn, they are more inclined to use avoiding or integrating than dominating strategies. By applying this rationale to the current research, a set of theory-driven propositions could be developed, i.e., how combinations of valence, locus and relationship elicit different kinds of face concerns and which channels are most suited to pursue the corresponding facework strategies. Beyond that, due to its culture-oriented background, face-negotiation theory could even contribute to channel choice research with its consideration of socio-cultural determinants, like the individualistic-collectivistic distinction and the according construal of the self in relation to others.

While the focus on individuals' perception of channels is one of the strengths of the current approach, it also constitutes a certain challenge. The fact that buffer effects vary among individuals and are not exclusively tied to objective channel characteristics makes research more complex. Many of the studies presented here yielded no differences in actual channel choice according to conventional predictions (O'Sullivan, 2000). They only became apparent when the buffer effect each individual ascribes to a certain communication channel was considered. While buffer effects of channels are not independent of objective characteristics (Wotipka, 2016), the individual variance seems to be substantial. In order to make reliable predictions of an individual's channel choice, we accordingly have to know the person's "buffer pattern" regarding available channels.

On a more general note, the buffer effect is basically a psychological proxy that combines different aspects of emotional and interactional control that affect the sending and receiving processes during communication. In order to advance research, I would not cling to the term "buffer effect" itself but emphasize the importance of understanding which communication goals people pursue in socio-emotional situations and how they intend to control communication by utilizing a channel's subjective affordances. A recent approach to capture such crucial affordances is found in the "perceived social affordances of communication channels scale" (Fox & McEwan, 2017). This scale is definitely less convenient due to its length but might provide a bigger picture in this regard.

Another issue that has been addressed here but is still up to further inquiry is the intentional alteration of channel choice behaviors, supposedly a blind spot in CMC research up to this point. As previously discussed, regulatory focus manipulation may be one means to achieve this. But other ways to intentionally influence users' cognitive processing are imaginable as well. For example, research has shown people's attentional prioritization of spaces near their hands (Reed et al., 2006) and that the processing of stimuli in peri-hand space can differ from that of stimuli outside of it (Agauas et al., 2020). More specifically, emotional stimuli within peri-hand space are processed in a way that unpleasant visual stimuli are enhanced (Du et al., 2017). Applying this phenomenon to the present research, the experience of conveying negative messages might be buffered solely by texting or video-calling recipients via desktop computers instead of using a handheld smartphone. Conversely, however, the mere act of holding a device (instead of no-touch viewing) has also been shown to lead to a reduced feeling of interpersonal connection to others (Banks et al., 2017). Hence, while the direction of effects is uncertain, this calls for an exploration of how the decision for a particular device may impact people's experience of socio-emotional communication.

# Conclusion

This thesis is dedicated to the psychological underpinnings of communication channel choice in socio-emotional contexts. Several reasons behind people's choices have been identified, which range from rather pragmatic to primarily symbolic justifications. But the most prevalent group of reasons represents people's tendency to consider how different choices will influence the upcoming communication. I focused on the latter and investigated the subjective buffer effect people establish through strategic channel choices. This behavior is affected by contextual factors, i.e., whether the message is positive or negative, focuses on sender or receiver, and how their relationship is perceived. Beyond that, a way to influence this tendency by altering people's momentary cognitive processing was explored. In sum, this work contributes to the current state of computer-mediated communication research with an approach that refers to psychological processes in order to explain individual channel choice behavior. This is achieved by considering the different communication goals that arise from socio-emotional determinants of a situation and how channel affordances support the pursuit of those goals. This psychological perspective may provide a more sustainable approach to channel choice research than a focus on distinct media, since technologies and their ways of use may evolve – but human needs, motives and goals will not.

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# APPENDIX

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| Study 1.1 | Tretter, S., & Diefenbach, S. (2020). Emotion and Interaction Control: A Motive-Based Approach to Media Choice in Socio-Emotional Communication. *Multimodal Technologies and Interaction, 4*(3), 53. |
| Study 2.1 Study 2.3 | Tretter, S., & Diefenbach, S. (in press). The Buffer Effect: Strategic Choice of Communication Media and the Moderating Role of Interpersonal Closeness. *Journal of Media Psychology*. |
| Study 2.2 Study 2.4 | Tretter, S., & Diefenbach, S. (unpublished manuscript). Strategic Self-Presentation through Communication Channel Choice: The Receive Perspective and the Effect of Hierarchical Status on Sender's Choice. |
| Study 3.1 | Tretter, S., & Diefenbach, S. (2021). The Influence of Regulatory Focus on Media Choice in Interpersonal Conflicts. *Psych, 3*(1), 1-17. |

*Article*

# Emotion and Interaction Control: A Motive-Based Approach to Media Choice in Socio-Emotional Communication

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**Abstract:** A large part of everyday communication is mediated by technology, with a constantly growing number of choices. Accordingly, how people choose between different communication media is a long-standing research question. However, while prominent media theories focus on how media characteristics affect communication performance, the underlying psychological motives of media choice and how different technologies comply with these are less considered. We propose a theoretical framework that links media characteristics with peoples' intentions to influence communication and present a qualitative study on reasons for media choice in socio-emotional situations. An analysis through the lens of the framework illustrates how users employ media to establish control over the interactional speed and emotional intensity of communication and thereby regulate their communication experience. Besides an advanced theoretical understanding, the present analysis provides a basis for a conscious design of communication media, to deliberately shape the way people interact with technology and each other.

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## 1. Introduction

Nowadays, a large proportion of everyday communication employs technological means and a vast array of various communication media is at our disposal. Instead of talking to someone face-to-face, we can, for example, make a phone call, leave a voicemail, or just send a plain text message. Still, it is a long-standing question how people choose between all those different channels available [1], and what makes a channel "the best choice". Despite its everyday relevance, there is no definite answer or comprehensive model of media choice yet—which, however, becomes understandable as soon as one considers the challenges that arise out of the ongoing technological development. In fact, research on media choice has to deal with ever new communication media with more or less different features and different usage patterns due to situational circumstances, increasing expertise, or social contexts.

To address this challenge and the ever-changing character of communication media from a technological point of view, we propose a theoretical framework that focuses on how people try to influence communication processes through a deliberate choice of media. Thereby, we aim to contribute to a line of research that puts needs and motives of control at the center of computer-mediated communication (CMC) [2–4]. While media are prone to change, psychological motives in interpersonal communication are not. Understanding these motives can help to explain behavior across situations as well as technologies and provide a starting point for designing media in a way that serves users' needs while avoiding detrimental effects on the communication itself.

In early media choice research, there was a common understanding regarding information transfer, that all artificial communication channels are inferior to face-to-face communication since

they were lacking nonverbal cues [5]. This was mostly based on the conception that communication media deprive the message of valuable information and because task performance was at the core of this research. However, later on, this rigid view became obsolete due to studies showing that communication media can reach the same levels, although it might take time to establish the necessary familiarity in interaction with the medium [6]. Still, the focus of research was on performance and factual information transfer, since new communication media were usually implemented in vocational contexts first. However, with the spread of communication media into everyday life, a more human-centered, socially-oriented scientific approach to the study of communication media emerged [7–9]. While private computer-mediated communication also serves instrumental goals (e.g., finding a date to meet for a coffee), socio-emotional issues (e.g., sharing positive news, canceling the long-planned date) are arguably just as, if not even more, important.

In the remainder of this paper, we propose a perspective considering psychological motives of control guiding media choice, put them into context with two dominating media theories originating from collaborative contexts and apply this theoretical framework to cases of socio-emotional communication (i.e., communicative acts that elicit positive or negative feelings under the presumption of social feedback). Drawing upon a qualitative analysis of reasons for choosing certain media in the context of an online-study with 194 participants, we apply the motive-based perspective to show how human choice behavior can be conceived by considering intentions to instrumentalize media capabilities, and discuss how the present framework may inform media design for positive experience and wellbeing.

## 2. Theoretical Background

The technological means people utilize to communicate, collaborate, and share information as well as emotions is constantly evolving. One way to deal with these ongoing changes is to examine why people use certain media and what for. The so-called uses and gratifications approach (U&G) was originally applied to mass media and people as an audience that actively seeks exposure [10,11] but was later extended to all kinds of media such as the telephone [12], blogs [13], or social media [14]. It explains the use of technologies with the social and psychological gratifications their usage provides, or, in other words, which distinct needs are satisfied by a certain medium. This approach perfectly aligns with the human-centered perspective of human–computer interaction (HCI): by linking media characteristics to the psychological motives they satisfy, reasons for media choice can be explained and conclusions for the design of such technologies can be drawn.

Communication, especially about emotional issues, plays a substantial role in people's wellbeing and is affected by the technology that mediates it [15–17]. Furthermore, in line with the assumptions of U&G, people are likely to anticipate the impact of different channels on the communication experience and, therefore, deliberately choose communication media in dependence of the socio-emotional circumstances. By applying a motive-based approach to media choice in socio-emotional contexts, subjective reasons beyond objective media characteristics are revealed and can be addressed in terms of better user experience. To this end, we will start upon two prominent media theories that revolve around objective media characteristics (i.e., richness and synchronicity) but will subsequently elaborate on subjective motives that have been shown to influence media choice in socio-emotional contexts, before introducing a theoretical framework to analyze media choice in terms of control over specific communicational aspects.

### 2.1. Theories of Computer-Mediated Communication (CMC)

Arguably, among the most influential theories on communication media is media richness theory (MRT) [18,19]. According to MRT, the best performances in tasks that involve communication over media are reached when the richness of the channel matches the equivocality of a task. Tasks are considered highly equivocal when the information they build upon can have multiple or conflicting interpretations, so that a shared understanding of its meaning has to be established. To this end,

communication media are categorized along four characteristics that foster this establishment of shared meaning: the ability to transmit multiple cues (e.g., nonverbal information, mimics), to implement a personal focus, the immediacy of feedback, and the variety of language the channel allows for. The best performance is to be expected when rich media are used in cases of high equivocality, while under low equivocality, leaner media are sufficient enough to exchange information without unnecessarily "overloading" the receiver.

Another prominent and further developed theory of communication media is media synchronicity theory (MST) [20]. Within MST, synchronicity is defined as "a state in which individuals are working together at the same time with a common focus" (p. 581), while media synchronicity is in turn "the extent to which the capabilities of a communication medium enable individuals to achieve synchronicity" (p. 581). Similar to the matching notion of MRT, MST predicts the best performances in tasks when the synchronicity of a medium fits the synchronicity a task requires. MST proposes five media capabilities that either increase or reduce synchronicity. High synchronicity results from high transmission velocity, that is, the speed of message delivery, and more symbol sets, that is, the number of ways information can be transmitted. Low synchronicity, on the other hand, is established through media that provide the possibility to rehearse a message before transmission (rehearsability), to process it longer or again afterwards (reprocessability), or to handle multiple transmissions at the same time (parallelism). Without diving further into the propositions of MST, it is a reasonable starting point when investigating media choices that are aimed to intentionally influence communication experience and outcome. As Dennis, Fuller, and Valacich [20] point out, MST does "not specifically address situations where some participants desire to [ . . . ] control how other participants interact [ . . . ], however, parts of this theory may be useful in this research area as well." (p. 579). This notion becomes particularly important, when media choice is not aimed at the best performance but other motives, such as self-presentational and relational goals [21], which become especially relevant in socio-emotional contexts.

In sum, two key concepts that emerge in both theories, MST and MRT, are synchronicity and richness. When further defining these concepts and characteristics of media, MST puts more emphasis on time-based characteristics, since speed of interaction, rehearsability, and reprocessability "most directly relate to synchronicity" [22] (p. 192). MRT, in turn, defines three (out of four) characteristics with regard to cues and information, namely transmission of multiple cues, personal focus, and language variety [23].

In contrast to MRT and MST, that propose which media should be chosen when, research on U&G explores which channels are chosen and why [24–27]. Additionally, MRT and MST take a reductionist approach and focus on certain objective media characteristics, whereas U&G conceives each medium in a holistic way. Combining elements from these different approaches, our framework allows to connect psychological motives of media choice with particular media characteristics. More specifically, we examine how different emotional situations might influence the preference for media characteristics that provide control over certain facets of communication.

## 2.2. Motives for Media Choice

Media choice, just like behavior in general, is highly dependent on contextual factors [4,28,29]. A universal distinction that can be used to categorize human behavior is that of approach and avoidance motives: approach motives promote behavior that is directed towards desired end-states, while avoidance motives activate a tendency to avoid undesired end-states [30]. For example, one person might volunteer to give a talk on a certain subject to gain respect among his or her fellow researchers (approach), while another one might refrain from it out of fear of being embarrassed in the public speaking situation (avoidance).

O'Sullivan [31] was one of the first to focus on the subjective media capacities that could serve avoidance motives in communication. In cases of negative messages that might threaten the self-presentational goals of a sender (e.g., confessing that one made a mistake) or a receiver

(e.g., accusing the receiver of a mistake), preferences for CMC (vs. face-to-face conversation) increased, probably since the stripped-down communication (i.e., less synchronous, less "rich" in terms of sensory cues) can reduce the fear of an anticipated, distressing communication. This is what O'Sullivan [31] called the "buffer effect" (p. 414) of mediated channels, such that they can provide a metaphorical shield one can hide behind [32,33]. Beyond that, communication media can affect the transmission of messages as well. For example, channels of an asynchronous nature provide time to construct messages the way they are intended before sending them [34]. Taken together, the buffer effect of an asynchronous medium can protect a sender from the distressing reaction of the receiver and, additionally, provides the sender with control over the interactional speed of the conversation. Thus, the strategic decision for mediated channels can be seen as an act of establishing protection and control in socio-emotional communication [35,36].

Conversely, there are also instances in which channel choice might be guided by approach motives, so that the sender does not strive for the avoidance of negative outcomes but actively tries to influence the situation in a way that it ends up with the most optimal outcome such an event allows for. For instance, in an examination of reason for media choice by Riordan and Kreuz [34], some participants appreciated a channels' capacity to "soften" the impact of a negative message on the receiver rather than avoiding his reaction. Apparently, while some individuals might experience control in difficult situations by avoiding direct exchange with others, other individuals might do so by approaching it. That is why Feaster [2] distinguishes between individuals in terms of their ability to use a channel to restrict certain forms of information (privacy control) and to regulate the flow of information (expressive control). Some individuals' preference to directly approach rather than avoid the other person in critical situations is also represented in the reasons for media choice reported by Kayany, Wotring, and Forrest [4]. By refraining from text messaging and making a call, one might not be able to strategically withhold information that easily, but it might facilitate persuasive attempts instead. Thus, to give up control over the message itself (i.e., content control) might, in turn, come with more control over the receiver (i.e., relational control).

Taken together, the basic psychological need of relevance is being in control of the situation, while "taking control" may look different, depending on whether approach or avoidance motives are dominant. In a communication situation, media choice is a means to pursue the need for control and align the communication with the dominant motive. Thus, depending on the current motive, media choice is used to speed up or slow down an interaction or to enhance or reduce its emotional impact. Note, however, that the present focus on approach or avoidance motives is only one perspective on explaining media choice, and also other variances in individuals' personality and behavioral tendencies can be relevant. For example, traits such as CMC anxiety [37], attitudes towards different media [38] and self-perceived competence regarding their usage [39] may play a role as well.

## 2.3. Framework

Based on the theories and empirical evidence outlined above, we propose a theoretical framework to connect media characteristics with reasons for media choice in cases of socio-emotional communication (Figure 1).
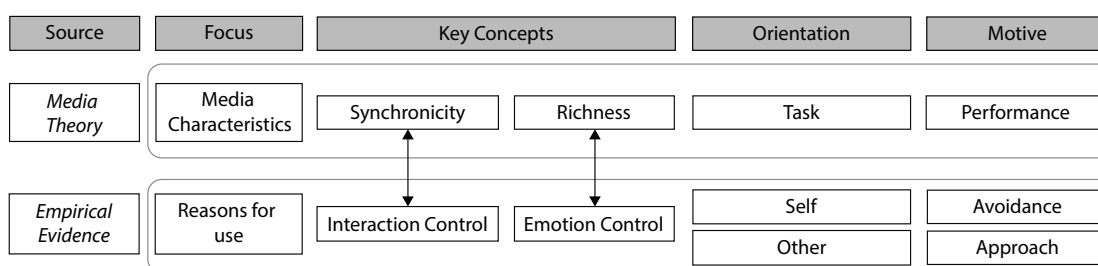


**Figure 1.** Theoretical framework developed from media theory and empirical evidence.

Compared to MRT and MST, we use a simplified and more colloquial understanding of the key concepts of synchronicity and richness. We refer to synchronicity as the conversational speed or interactivity a channel establishes, that is how much time one has to construct and process messages and how immediate feedback is to be expected. On the other hand, we refer to richness as the amount of cues a channel is able to transfer, that is how vivid and similar to face-to-face conversation the communication experience is. In contrast to both of those theories, which propose optimal media choices [23], we are interested in how people subjectively choose between channels. Therefore, we use these concepts in parallel to how lay people may think and speak about media and their choice rationales. For example, when people label a medium synchronous, they probably refer to the typical conversational speed and not the more elaborate MST perspective which includes a channel's "symbol variety".

Moreover, while MRT and MST address the issue of communication performance, we draw upon empirical evidence and suppose that in socio-emotional communication the overall aim is to avoid undesired end-states (avoidance) or reach desired states (approach) while focusing more or less on oneself (self-focus) or the receiver (other-focus). Accordingly, depending on the situation, media whose capabilities serve the underlying motives are more likely chosen.

As outlined above, communication media can induce different degrees of synchronicity and richness of communication. So, for the user, media choice can serve as a means to establish interaction control (i.e., influence synchronicity) and emotion control (i.e., influence richness). We assume that this leverage of control over the communication constitutes a decisive cluster of reasons for media choice in socio-emotional contexts. Whether this control is used to approach or avoid certain consequences may vary in dependence of sender, receiver, and situation.

Our theoretical approach builds on the work of O'Sullivan [31], who brought forward the idea of control through certain media characteristics, but it differs from his impression management model in several ways. First, O'Sullivan's model does not clearly distinguish between interactional and expressive control and how they relate to different media characteristics, respectively. Second, O'Sullivan's model considers positive impressions and long-term relational development but not other-oriented reasons and their immediate (negative) consequences, such as addressing someone directly to soften the impact regardless of an own exposure to negative experiences. Third, as O'Sullivan [31] states himself, people try to minimize risks and maximize rewards but each choice can come with a complex interplay of pros and cons. In our approach we further explore the assumed psychological motives behind this decision process, such that avoidance motivation highlights costs while approach motivation accentuates rewards.

The following exploratory, qualitative study served two main research goals. First, we aimed to complement existing research on media choice from a socio-emotional perspective by highlighting the various reasons why people choose communication channels with certain characteristics. Second, we aimed to test the suitability of the proposed framework to systematically categorize reasons for channel choice according to dimensions of control over communication. In this regard, the framework may also function as a basis to deliberately design communication technologies in a way that produces beneficial socio-emotional outcomes while avoiding other detrimental effects, thereby supporting wellbeing in the long run.

## 3. Materials and Methods

### 3.1. Sample

In total, 194 participants (29.4% male, 70.1% female, 0.5% other) were recruited for an online-study via institutional mailing lists containing students and working people as well as through Clickworker, a German-based crowd-working platform similar to Amazon Mechanical Turk. Their age ranged from 17 to 63 years (M = 28.5, SD = 11.2). The general frequency of use (on a five-point scale from 1 = "not at all"; 5 = "very frequently") of each medium was, in an order from highest to lowest,

"instant messaging (IM)/chat" (M = 4.36; SD = 1.15), "email" (M = 3.72; SD = 1.14), "telephone" (M = 3.37; SD = 1.06), "voice message/voice mail" (M = 2.36; SD = 1.38); "text message" (M = 2.08; SD = 1.09), and "video chat" (M = 1.97; SD = 1.12). All subjects gave their informed consent for inclusion before they participated in the study.

### 3.2. Materials

Participants were presented with short descriptions of hypothetical situations and then asked for their preferred communication channel and the reasons for their choice. The application of such vignettes [40] is a well-established method in psychological research to efficiently place participants in situations of interest while controlling for confounding factors. By pointedly varying specific wordings within the applied texts, changes in response to different vignettes can be attributed to these variations. By using vignettes instead of asking participants to come up with situations from their own experience, we intended to support imagination and ensure higher generalizability.

For the reasons described above and in order to stimulate variance in the surveyed answers, we used short descriptions of one-on-one communication situations very similar to those used by O'Sullivan [31] (p. 418) and only replaced the word "partner" as the receiver therein with a more general "other person". More specifically, the vignettes differed along two dimensions—valence and locus of the message. Regarding the valence dimension, vignettes were either supposed to induce positive or negative feeling states and thus comprised instances that were likely to elicit approach or avoidance motives. Regarding the locus dimension, messages either centered on the sender or the receiver of the message to create variance in whether the content is more significant to oneself or the other. By focusing on one-on-one communication and the variation of valence and locus, we implemented a very basic scenario of socio-emotional communication by covering the emotional aspect through positive and negative valence and the social aspect through another person as a reference point for the self or other locus of the message. We conducted this, again, in order to pursue generalizability and avoid the inclusion of the other, possibly confounding contextual factors, although it has to be noted that our applied vignettes, though similar in their structure, did vary to a higher degree than those in quantitative studies and provided several examples of suitable situations. This is because we were more interested in a broad range of individual experiences and reasons than in the specific effects evoked through systematic variation of the respective wordings.

By this means, we implemented four types of vignettes with situations representative of the two central components of socio-emotional communication. For example, a vignette representing the combination of negative valence and self-locus reads "Think for a minute about a topic, issue, or incident that would undermine how the other person thinks about you. For instance, this could be a discussion about you failing to meet his or her expectations, you doing something morally distasteful, you holding an opinion you know the other person would find repugnant, you being disloyal toward the other person, etc." (see Supplementary Materials for all vignettes). In another, yet unpublished study, we tested if these vignettes served as an appropriate means for manipulation by applying the self-assessment manikin scale [41] after media choice, a well-established measure for the emotional facets of pleasure, arousal, and dominance. As expected, participants reported less pleasure (mean difference = 4.646, 95% CI [4.265, 5.027], $p < 0.001$) and more arousal (mean difference = 2.127, 95% CI [1.778, 2.476], $p < 0.001$) when imagining the negative situation compared to the positive situation.

### 3.3. Procedure

Participants read the vignettes described above and were asked to put themselves in the outlined scenario. Subsequently, they indicated which of seven communication channels they would prefer in the given situation (i.e., "email", "text message", "instant messaging (IM)/chat", "voice message/voice mail", "telephone", "video chat", or "face-to-face conversation"). After choosing one of the seven available options, participants were asked to explain the reasons for their decision in an open answer to:

"Why would you prefer this channel? What speaks for this channel? What against others?" (cf. [34]). We implemented open-ended questions instead of predefined, theory-driven, or framework-based response options in order to leave room for previously unconsidered reason for choices. (Please note that the study was originally conducted in German language, and quotes were translated for the present paper). Additionally, people rated their frequency of use of each medium on a five-point scale and were asked to indicate their age and gender.

*3.4. Analysis*

In the initial stage of our analysis, participants' answers for each of the four vignettes were coded separately by two researchers following a dialectical procedure of deductive and inductive content analysis [42]. We did this to test the applicability of our framework that regards media choice as a means to influence emotional and interactional aspects of communicational processes (deductive, "theory-first") while allowing for categories to emerge that are not covered by this specific perspective (inductive, "theory-later"). First, open answers were coded in broad categories of reasoning about emotional and interactional aspects while skipping those answers to which this coding could not be applied. Subsequently, the yet uncategorized answers where analyzed separately and two additional categories, namely pragmatic and symbolic reasons, emerged and were integrated into the coding scheme. Additionally, the categories of emotion and interaction control were further specified according to whether reasons for choice revolved around oneself or the receiver and whether they focused on the sending or receiving phase of communication (see Supplementary Materials for the coding scheme). Similarly, the pragmatic reasons category was further split into convenience and habit. This resulted in a coding scheme with different degrees of granularity, and a multi-step categorization: If an answer contained, for example, a clear reasoning about how the media choice serves the sending of emotions for the sender, this category (self/sending) was ticked off. If it was not clear whether the participant chose the medium for sending purposes for his/her own sake or the receiver, both emotional sending categories (self/sending and other/sending) were ticked off. Additionally, if it was not clear if they focused their answer on the sending or receiving capacities of the channel, all four emotional categories (self/sending, self/receiving, other/sending, and other/receiving) were ticked off. The same applied for the interactional categories. Accordingly, the tables presenting frequencies of stated reasons for media choice in the results section is organized along the described schema.

After each step of the analysis process, results of both coders were compared and apparent discrepancies discussed until a consensus was reached and categories were redefined accordingly. In the initial analysis, where reasons were coded broadly as emotional and interactional, one source of discrepancy arose from the conception of "misunderstandings". Media choices to prevent misunderstandings could be conceived as a rather pragmatic reason to establish a common understanding of facts. However, a discussion of context led to the conclusion that it was more probably directed at an appropriate conveyance of intended emotions and the possibility of an immediate intervention as soon as the other person seems to get something wrong. That is why "less misunderstandings" was coded as a fit for all emotional and interactional categories.

Another difference between coders emerged regarding the categorization of answers containing a "direct reaction" as a reason for media choice. Arguably, "reaction" might be considered a signal for participants' focus on changes in emotion as a result of the communication. However, further inspection of the full answers rather hinted towards the respondent's intention to get an immediate answer ("direct" as the signal word), which is why these parts were assigned to the interactional categories. Furthermore, after the pragmatic and symbolic reasons categories were inductively created, some of the already coded answers were recategorized if the context-sensitive analysis revealed a better fit to the new categories. For example, referring to a channel as "more personal" was often directed at the symbolic meaning of the channel rather than the more emotional communication process.

Most notably, in line with our theoretical framework, we also intended to categorize answers according to underlying approach or avoidance motives, i.e., whether respondents based their decision

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rather on its possible positive or negative outcomes. However, without the opportunity to ask follow-up questions, there was not enough evidence to warrant a sound interpretation of answers in this regard, and we refrained from applying this scope for further analysis (see Section 5.2.1 Implications for HCI research and Section 5.3 Limitations).

All these adaptions were integrated into the final round of coding. In the end, intercoder reliability was calculated and yielded values of Krippendorff's alpha between $\alpha = 0.842$ and $\alpha = 0.968$, which indicate at least good reliabilities [43] (p. 236). From the original number of 280 statements, 211 (75.4%) could be analyzed in line with our coding scheme and built the final sample underlying our reported results. The remaining statements were mainly excluded due to a lack of information since people answered with thin arguments (e.g., "to me it seems like the best way") or gave apparently nonsense answers. Only 3.9% of the original statements were actually valid and did not fit the coding scheme (e.g., "no tracking, data collection or Trojan horses", "our family situation does not allow for any other way", "you can see if other people are around").

Before the results are reported in detail, it has to be noted that our coding procedure allowed for respondents' answers to fall into several categories, since they might have given several different reasons, which asks for a careful interpretation of the aggregated, nonweighted quantitative data. Additionally, there is much variance in whether the subjective reasoning led to richer or leaner and more or less synchronous channels even under the same (hypothetical) circumstances, which also illustrates why it is challenging to predict media choice in nonspecific contexts (i.e., broadly designed vignettes) and independent of the respective individual. Therefore, instead of making clear predictions of what channel people choose and when, our intention is to present and structure the manifold reasons people brought forward for explaining their decisions. This provides insights into which purposes people pursue when choosing their way of communication and why they might prefer certain characteristics (and different degrees of them) over others in socio-emotional contexts.

## 4. Results

In an initial quantitative analysis, we explored whether there was a relationship between the kind of vignette and media choice. Since the expected value of some cells was lower than five, we ran Fisher's exact test, which yielded no significant relationship ($p = 0.147$). As can be seen in Table 1, as expected, people generally tend to prefer face-to-face conversation for socio-emotional communication. More surprisingly, this was regardless of the situation, although previous research [31] would have suggested a significant shift in preference towards communication media under negative circumstances. Arguably, the hypothetical nature of the study design might have given way to a social desirability bias, such that people overestimate their willingness to choose the "upright" confrontation regardless of the anticipated negative reaction. Nevertheless, for the design of communication technologies, it is crucial to consider what reasons underlay media choices and why one would prefer (not) to use them.

**Table 1.** Relative frequencies [% of column] of channel choice for each vignette.

| Channel | Vignette | | | |
|---|---|---|---|---|
| | Negative Valence | | Positive Valence | |
| | Self-Locus | Other-Locus | Self-Locus | Other-Locus |
| Email | 5.7 | 4.3 | 4.3 | 2.9 |
| Text message | 4.3 | 1.4 | 0.0 | 1.4 |
| IM/chat | 15.7 | 21.4 | 25.7 | 20.0 |
| Voice message | 1.4 | 0.0 | 2.9 | 4.3 |
| Telephone | 1.4 | 7.1 | 10.0 | 14.3 |
| Video chat | 2.9 | 0.0 | 2.9 | 0.0 |
| Face-to-face | 68.6 | 65.7 | 54.3 | 57.1 |

As described above, the analysis of open answer data led to four general categories, namely (1) interaction control, (2) emotion control, (3) pragmatic choice, (4) symbolic choice. While the two former categories addressing the deliberate use of media to influence communication were already represented in our theoretical framework, the two latter categories referring to a more automatic selection process emerged as new relevant categories from participants' statements. Tables 2 and 3 depict the relative frequencies of the reasons according to the final coding scheme, clustered for the four vignettes (Table 2) and each of the possible channels (Table 3). Given the results of Fisher's exact test and the rather equal frequency distributions among different vignettes, it becomes even more important to take a closer look at the individual answers.

**Table 2.** Relative frequencies [% of row] of reason categories for each vignette [1,2].

| Vignette | Reason Category | | | | | | | | | | |
| | Interaction Control | | | | Emotion Control | | | | | | |
| | Self | | Other | | Self | | Other | | Pragmatic | | |
| | **Send** | **Rec** | **Send** | **Rec** | **Send** | **Rec** | **Send** | **Rec** | **Conv** | **Habit** | **Sym** |
| Negative Self | 11.4 | 10.8 | 7.6 | 9.2 | 11.9 | 12.4 | 9.2 | 10.8 | 4.3 | 2.2 | 10.3 |
| Negative Other | 11.0 | 9.3 | 10.1 | 10.6 | 11.9 | 10.1 | 10.6 | 11.9 | 5.3 | 4.0 | 5.3 |
| Positive Self | 13.8 | 12.9 | 12.4 | 12.9 | 9.2 | 8.8 | 9.2 | 10.1 | 2.8 | 3.7 | 4.1 |
| Positive Other | 12.0 | 11.6 | 12.0 | 12.0 | 10.3 | 10.3 | 10.3 | 10.7 | 3.4 | 2.6 | 4.7 |

[1] Abbreviations: Send = Sending; Rec = Receiving; Conv = Convenience; Sym = Symbolic. [2] Note: if a reason could not specifically be attributed to a single category on one level of the coding scheme, it is counted as valid for all categories in question (for further explanation, see Section 3.4 Analysis).

**Table 3.** Relative frequencies [% of row] of reason categories for each channel [1,2].

| Channel | Reason Category | | | | | | | | | | |
| | Interaction Control | | | | Emotion Control | | | | | | |
| | Self | | Other | | Self | | Other | | Pragmatic | | |
| | **Send** | **Rec** | **Send** | **Rec** | **Send** | **Rec** | **Send** | **Rec** | **Conv** | **Habit** | **Sym** |
| Email | 19.5 | 19.5 | 12.2 | 14.6 | 7.3 | 7.3 | 4.9 | 4.9 | 4.9 | 2.4 | 2.4 |
| Text message | 33.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 66.7 | 0.0 | 0.0 |
| IM/chat | 20.6 | 19.1 | 15.4 | 16.2 | 4.4 | 3.7 | 1.5 | 2.9 | 9.6 | 5.1 | 1.5 |
| Voice message | 14.3 | 9.5 | 14.3 | 14.3 | 9.5 | 9.5 | 9.5 | 9.5 | 0.0 | 0.0 | 9.5 |
| Tele-phone | 17.9 | 16.0 | 16.0 | 16.0 | 7.5 | 6.6 | 6.6 | 6.6 | 4.7 | 0.0 | 1.9 |
| Video chat | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 |
| Face-to-face | 8.1 | 7.8 | 8.3 | 8.9 | 13.4 | 13.0 | 13.0 | 14.3 | 2.0 | 3.4 | 7.8 |

[1] Abbreviations: Send = Sending; Rec = Receiving; Conv = Convenience; Sym = Symbolic. [2] Note: if a reason could not specifically be attributed to a single category on one level of the coding scheme, it is counted as valid for all categories in question (for further explanation see Section 3.4 Analysis).

The following sections illustrate the four categories by exemplary statements and discuss relationships of the control categories (interaction control, emotion control) in relation to high and low degrees of richness and synchronicity. Notably, though the provided vignettes differed in valence and locus of the message, it turned out that respondents' answers mainly revolved around whether the message was pleasant or unpleasant, less if it focused on them or the receiver. That is why instances of positive and negative messages are reported separately for the two control categories (interaction control, emotion control) and only split up for self- and other-orientation in channel choice (while approach and avoidance motives are not reflected due to the reasons outlined above). Furthermore, though there were also rather general answers that covered multiple categories, the exemplary quotes

given below originate from those statements that could clearly be assigned to a single category on the lowest coding level, i.e., self- or other-orientation.

While emotion and interaction control perceived by an individual are especially tied to a channel's richness and synchronicity, pragmatic and symbolic reasons were mostly based on context in terms of valence and importance of the situation. Figure 2 gives an overview of the four different main categories of reasons for media choice that are applied to structure our results.
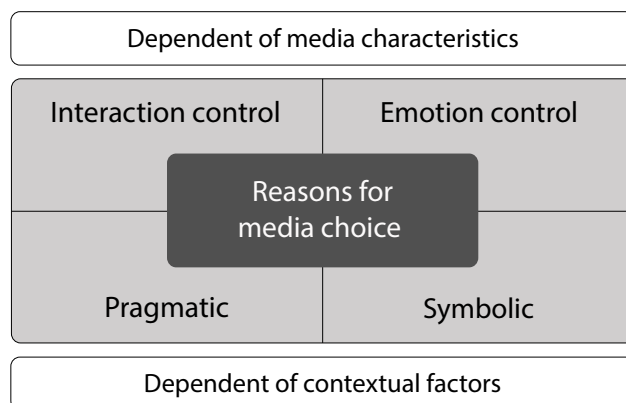


**Figure 2.** Four categories of reasons for media choice.

### 4.1. Interaction Control via Synchronicity

#### 4.1.1. Negative Valence

When asked about which medium participants would choose for a negative message and why, one set of reasons emerged that addresses the synchronicity of a channel and how they are able to influence the speed of the back and forth of interaction in their favor. Actually, here as well as in many other cases, participants interestingly differed in whether they would prefer high or low degrees of synchronicity.

Self-Orientation: As expected, in many cases, people appreciated the asynchronous nature of some media since they gave them "more time to accurately phrase the message as intended" and "to postpone (and ignore) answering for a long time". However, there were also participants who sought for high synchronicity because it gave them "the possibility to explain themselves" since the "direct question-answer-dynamic allows for immediate justification". Besides those two self-serving reasons addressing the sending phase of communication, explanatory statements regarding the receiving phase were also provided. Asynchronous channels would allow them "to defer the processing of other's reaction" and "read the answer when" they are "ready for it", while the advantage of more synchronous communication was seen in the "immediate feedback, whereas a delayed answer would drive me crazy" and that one does "not have to wait forever for the judgment of the other person".

Other-Orientation: Apart from that, there were reasons that instead took the other person involved into consideration. Some of these are very similar in the effect the medium has for the conversation but differ in how they impact the receiver's behavior. For example, one participant said that an asynchronous channel would not allow the receiver to instantly transmit his or her reaction, thereby preventing "an emerging dynamic that might escalate", while another intended "to give her enough time for her response". On the other hand, some participants actually preferred that interactivity since it "disables the other from preparing a strategy" or "makes it impossible to avoid answering me". Congruently, there were two-fold reasons regarding synchronicity and the receiving process of the other person. Just like for the sender, some participants cared about the possibility for the receiver to "have time to process the information", pleading for asynchronous communication. In contrast, synchronous channels were valued as a means to establish "the possibility of immediate requests" for the other to allow for clarification but also because the other person "has to face the problem".

### 4.1.2. Positive Valence

Notably, when asked about why they would choose their preferred medium for positive messages, participants named reasons that were partly already represented in the answers regarding the conveyance of negative messages but also reasons that can be classified as contrary to those mentioned above.

Self-Orientation: For some senders, for instance, positive issues equally spoke for the use of channels with low synchronicity since they enable them to "better formulate" their messages and "read through it multiple times". However, many reasons for asynchronous channels instead indicated pragmatic reasons. Others perceived high transmission velocity favorably since they "could not await to share the information", preferred to sustain the "actuality", or to "immediately give way to their joy" because "the immediacy of emotion is what matters". Some senders also covered the consequences of the media choice for their own processing phase in a way that also implied more pragmatic reasons such as "I do not need an immediate reaction". Conversely, others specifically appreciated the chance to call for an "immediate response" with highly synchronous channels since they in turn could "not await the reaction" and would be immensely "curious how the other will react".

Other-Orientation: In accordance with the reasons on negative messages, a relevant proportion of participants based their open answers on how their media choice would affect communication for the receiver. Again, some of those can be categorized rather pragmatically in a way that it provides others with the opportunity to "read the message when he or she has time to" (i.e., receiving category) or to "answer at their convenience" (i.e., sending category). Several participants stressed the point that positive messages "are not prone to misunderstandings" and, therefore, did not intent to resort to synchronous channels, while others did so with the "possibility to directly ask further questions" in mind. Analogously to sender needs, it was also appreciated that more synchronous channels sustained a chronological closeness between the incident and the actual conversation about it for the receiver in order for him to "receive the news as fast as possible". Then again, a reason for asynchronous channels in favor of the other person was that one "receives the message immediately as soon as she is available", as well as the possibility that the receiver "will be surprised by the message".

To sum up, the results presented above indicate that people utilize communication channel synchronicity for interactional control in order to accelerate or slow down the conversation in their or others' favor. Which intention they pursue in a certain situation appears to be individual, though.

### 4.2. Emotion Control via Richness

### 4.2.1. Negative Valence

Another set of reasons concerning the transmission of negative messages focused on the richness of the respective channels and how they shape the conveyance and experienced intensity of emotion through that medium. Here, again, participants often brought forward reasons that supported either the use of high or low richness channels depending on their individual preferences.

Self-Orientation: Regarding the sending phase of communication, participants tended towards leaner media since this "makes it easier to be honest" and "to communicate unconstrained and sincerely" while one participant interestingly chose instant messaging since "feelings can be made clear through emojis", which implies that this way of communication might at times even be perceived richer than a face-to-face conversation. Usually, participants that chose conventionally richer media explained their choice with the possibility to clearly transmit their emotional state, that is "to better convey my feelings" or even "evoke compassion within the receiver". A common receiving capacity that leaner channels provide and was often mentioned is the previously discussed buffering effect that allows the sender to "be shielded from negative reactions", e.g., "you do not experience disappointment that intensely". However, one participant stated that he/she intends to achieve this avoidance of negative feedback by consciously choosing a richer channel, because it "makes it difficult for the other one to

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get really mad". Conversely, people choose richer channels for receiving purposes to assess emotional states, e.g., "to better sense the other's regret".

Other-Orientation: An additional category of reasons focused more on the consequences the media choice would have for the respective receiver. One participant named voice messaging as the channel of choice, for one thing, because it gives him time to construct a message, but secondly, because the other person will probably answer via voice messaging, too, which gives the receiver the opportunity to "convey his or her actual emotions through their voice". Furthermore, some answers addressed the other person's receiving phase. Participants considered in their choice that "the other might find a real conversation uncomfortable" or "might unintentionally be hurt by mimics", therefore, preferring a leaner medium, while others valued richer channels in negative situations, since they "make it easier for the other to empathize with me" and "to comprehend my actions".

### 4.2.2. Positive Valence

Reasons about why people choose certain media for the conveyance of positive messages also partly focused on their richness and influence on emotional intensity, respectively.

Self-Orientation: Regarding the transmission of emotions, people, for example, emphasized that richer channels allow them to "express their joy, and emotions in general, most appropriately", to "capture their emotions" and "convey their excitement better", even if it is through a rather asynchronous "joyful voice message". On the other hand, some participants did care less about these affordances and resorted to leaner channels since positive messages "do not require non-verbal information" because of the lack of potential misunderstandings. Additionally, one participant interestingly preferred text messaging, although it is conventionally supposed to be a channel with lower richness, since the use of emojis enables him to show an overly positive reaction, even surpassing face-to-face communication. Senders also showed the intention to influence their processing phase of communication by choosing leaner media because they either ascribe less importance to the reaction to positive messages or "are not sure about their reaction and afraid it could not be as expected". On the contrary, advantages of richer media in this regard seem to lie in "the unfiltered experience of reaction", "the feeling of common happiness", or the ability to intensify the experience since "a joy that's shared is a joy made double".

Other-Orientation: Here, as well, open answers of participants implied intentions to affect the communication behavior and experience of the receiver. Senders might choose communication media with the presumption in mind that it calls for the receiver to respond over the same channel. Thus, people might choose rich channels because it enables "the other to show their reaction appropriately". One participant, for example, indicated voice messaging as their channel of choice since "a voice message will supposedly come back and emotions can be conveyed through voice". Another set of reasons revolved around how the other might receive the message. While a couple of respondents worried about that the receiver might be uncomfortable with an overly positive message (similar to negative messages), most participants appreciated richer ways of communication since they "intensify", "have the biggest impact", and "let the other actually feel the excitement".

The aforementioned reasons illustrate that people deliberately choose media according to their richness in order to either attenuate the emotional experience or to convey and receive emotions accurately. Here, again, motivations appear to be individual, but the emerging categories back up the notion of emotion control through channel choice.

A comparison of reasons for media choice in positive and negative situations supports the presumption that avoidance motives in negative situations and approach motives in positive ones are in many cases decisive for channel preferences, although individual differences in the perception and usage of several media as well as an interpretation of the situation and the care for the receiver might still cause people to act otherwise. Apart from the two categories of reasons proposed by our applied framework, namely emotional intensity and interactional speed, two other categories emerged within the analysis process that were also reported by other authors.

### 4.3. Pragmatic Reasons

Statements in this category referred to simple pragmatic reasons for media choice, some mentioning explicitly that emotional matters were of no concern, e.g., stating that the issue "is not critical" and the pragmatic media choice "therefore sufficient". The pragmatic category encompasses reasons that are either tied to the instrumental advantage of the medium in the given situation or rather based on behavioral habits. The former is reflected in open answers that emphasize that the chosen medium is, for example, "easier", "faster", or "more comfortable to use". People in these cases mostly appreciated the use of asynchronous media since they could "immediately leave the message", it "does not cost anything", and "takes less effort". The latter group of pragmatic reasons focuses on habits that are not bound to certain circumstances but represent established communicational routines. Answers falling into that category, for example, were "It is my favorite channel.", "I just hate using the phone.", or even "We use this channel the most.", implying a habit that evolved with a specific receiver.

### 4.4. Symbolic Reasons

The second category that emerged throughout analysis is shaped by a focus on the reception of media choice by the receiver and was especially relevant in negative contexts, namely the symbolic value of the chosen channel. Answers in that category often referred to situations that were perceived as highly important, no matter if in the positive or negative direction. Participant answers that represent this cluster of reasons mainly referred to the channel as being "more personal", "appropriate", or "the right one to choose". The answers indicate that communication media, apart from their specific characteristics, are also socially conceptualized in a way that their choice itself already sends a message. This is particularly illustrated within participants' answers that stated that the channel is, for instance, "more sincere", underlines "the seriousness of the issue", or "shows personal appreciation". Above that, a similar group of reasons representing the symbolic value of media choice also focused on whether the medium fits the situation. People occasionally explained their choice by elaborating on how it is "more formal", "not too personal, not too distant", or "more appropriate in friendship relations". In these cases, there seemed to be just one "right" choice that would be perceived socially acceptable in a given situation, so that there was no room to deliberately choose a channel that might serve personal motives.

## 5. Discussion

The present research connects media characteristics with reasons for media choice in cases of socio-emotional communication. The suggested framework displays a number of relevant influencing factors that may help to understand how people choose between available communication channels, and to align media design with an envisioned experience. As our findings show, there are numerous reasons why it is hard to predict peoples' preferences for different communication channels.

First, this is because people do not always base channel choice on rational factors or principles of efficiency. Altogether, our findings hint towards a context-dependent shift from instrumental goals to self-presentational and relational goals. While theories such as MRT and MST propose media choices that serve instrumental goals, there is a wide array of self-presentation and relational goals that also contribute to individual decision processes. If people would act solely on objective motives of information exchange, positive messages would primarily be conveyed over asynchronous media, since there is no further interaction required and communication would unnecessarily tie up additional resources. Negative instances, on the other hand, would lead to media choices with a high degree of richness and synchronicity, since they demand for clarification and resolution of the topic. However, our results indicate that people might tend to engage in rich and synchronous communication in cases of positive messages to fully experience its impact and refrain from its usage under negative circumstances in order to avoid negative experiences. Moreover, people seem to occasionally even disregard short-term negative experiences in order to preserve the long-term relationship with the receiver.

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Second, our results show that the same psychological motives can lead to different media choices. While a common intention of media choice in negative situations is the intention to shield oneself from a negative reaction of the receiver and people mostly pursue this by using channels with a low degree of richness, there are also cases in which people act in a different manner. One participant, for example, intentionally chose a particularly rich communication channel, considering that this way, it should be even more difficult for the receiver to react in an overly "extreme" way. Another respondent chose text-messaging, a text-based channel we would consider quite lean, but did so because of the opportunity to use emojis for overly positive reactions. This indicates an "enrichment" of the channel through a specific method of use that is not reflected in our broad conception of richness. Such variances in behavior can stem from individual-dependent factors influencing perception of media, such as a person's confidence regarding communication via certain channels [2], their subjective CMC competence [39], or previous experiences [44] and socialization processes [45]. These individual traits have to be taken into account when considering variances in media choices beyond the situational factors and are the most probable explanation for why individuals act differently.

Third, it also became clear that the same media choices under similar circumstances can be an expression of different motives. For example, a major reason for people to establish an asynchronous interaction in cases of negative messages is the advantage of having time to rehearse and edit their messages beforehand. That is why they indicated a preference for email or instant messaging over channels such as the telephone. Others, who chose the same medium, however, brought forward the argument that this allows the receiver to take the time to process what he or she is confronted with. Of course, both reasons might play a role in the respective participants decision, but the fact that they answered how they did, suggests that one of them appears to be more relevant to these individuals in the given situation.

Fourth, there are the categories of pragmatic and symbolic reasons that are not fully represented in MRT or MST, nor our applied theoretical framework. Results indicate that they might interfere in the decision process at times, depending on how significant the present issue is perceived by the sender. On the one hand, in cases of low negative or positive valence, people do not enter a deliberate decision stage at all but automatically tend towards the medium that is most convenient for them in the given situation. On the other hand, when they are about to communicate over an issue that is expected to have a profound impact, they resort to socially appropriate ways of communication that match the seriousness of the situation. In these cases, there is no space for individual preferences, and the "right" media choice is predefined. This issue of socially acceptable behavior could raise the question for cultural differences that should be addressed in future research, since the present sample consisted solely of German-speaking participants.

All these notions taken from our data emphasize the value of qualitative analysis in media choice, since the underlying reasons for differences in behavior can be manifold. Thus, it is hard to predict such behavior generally, but on the other hand, it offers opportunities to design technologies in a way that enables users to establish the interaction they want (see Section 5.2.2 Implications for HCI practice and design). Focusing on the gratifications that users attain from control over the communication process appears to be one way to provide them with ways of communication that serve their individual needs and wellbeing in the long run.

### 5.1. Contribution to Previous Research

The present work provides a new theoretical perspective and qualitative insights into the underpinnings of media choice. We applied a framework based on previous works that dealt with the psychological motives that come into play in cases of socio-emotional communication and what reasons people act upon when they instrumentalize the effects of different media on communication. While other works mainly focused capacities of CMC to avoid reactions [31–33] or analyzed reported reasons for media choice rather inductively [34], we added to these works by also examining approach behaviors under negative circumstances and applying a theoretical perspective that links media characteristics,

i.e., richness and synchronicity, with their ability to establish control over the communication process. While Kayany, Wotring, and Forrest [4] examined media choices in less emotional and more instrumental terms such as persuasion and information gathering, there is a lot of correspondence between the reasons they reported and the categories we ended up with, which supports the validity of our results but also emphasizes the value of a control-based perspective on communication.

Beyond that, we integrated the distinction between self- and other-focus into our theoretical approach. Previous research also took receivers into account but only in terms of whether the other's goal is complementary or competitive to those of the sender [4]. Carlson and Davis [29] already elaborated on this critical factor by identifying several communication-partner related reasons for media choice that gain importance in situations of increasing interpersonal closeness between the actors. This matches our findings that people do not always choose among channels to their benefit but also decide in a way that these consequences serve the expected needs and motives of the receiver.

Beyond the control-oriented reasons incorporated into our theoretical framework, two additional categories of reasons emerged which we labeled pragmatic and symbolic reasons. A considerable proportion of participants handled messages in a way that could be described as rather pragmatic. Apparently, they did not perceive the incidents as a "big deal" and resorted to media that either were the most convenient or effective in delivering the message. This is congruent with the considerations of Carlson and Davis [29] that the initial intention that people follow when choosing communication channels is pragmatic and only if certain contextual factors come into play, e.g., socio-emotional relevance of the issue, other aspects gain importance in the decision.

On the other hand, the category of symbolic reasons, which were predominantly reported in the face of negative messages, stands in line with fields of media research that are characterized by a "symbolic interactionist" perspective [46]. According to this approach, communication media and their perception are socially constructed, so that the choice of medium is a message itself (e.g., how important the sender rates the issue). This results in a common understanding of which media are appropriate in certain situations, while a deviating choice leads to a violation of social norms. This symbolic role of communication media was also considered in what MRT calls the ability of a channel to establish a "personal focus" [19] or with "symbolism" in the impression management model [31]. Although the lack of cues of a medium might not always be detrimental to the communication [6,47], the right choice of channel holds a symbolic value that should not be disregarded.

The distinction between self- and other-focus illustrates another important insight that a motive-based perspective provides, namely that sender and receiver motives might not be compatible. For instance, while one might engage in asynchronous, text-based communication in the face of negative messages to shield oneself from negative reactions, the receiver would be deprived of their desire to experience the sender's authentic emotions first-hand. Thus, media choice can lead to situations in which contradictory needs have to be weighed against each other.

In socio-emotional contexts, this is particularly challenging since emotions serve as a means for providing social information that reduces uncertainty and negative interpretation biases [48,49], but people tend to be overconfident in how good they are at transmitting emotions via CMC [50,51]. However, communication media do not have to be a source of such conflicts but can be beneficial for the interpersonal exchange about socio-emotional issues, e.g., by lowering the psychological barrier to seek support after failing to meet others' expectations [52]. Therefore, possibilities to benefit from certain media characteristics without accompanying detrimental effects ought to be explored, including the rethinking of interactional norms [53], communication strategies [33,54], as well as communication media design.

*5.2. Implications*

The central goal of this study and its theoretical considerations was to add to the line of research on uses and gratifications by focusing on the capability of control through different technologies. A deeper understanding of the psychological motives that can explain why people use different communication

technologies and how they are expected to influence the interaction with each other contributes to the core objectives of HCI and provides implications to research and practice alike.

### 5.2.1. Implication for HCI Research

Apart from present study's limitations, which are outlined below, future research should be aimed at the integration of psychological motives within the decision process by relating them to media characteristics, social influences, and contextual constraints [55]. Previous research along with our present findings hint towards a hierarchical order of reasons for media choice in dependence of situational circumstances. In cases of low socio-emotional importance, people seem to tend towards pragmatical choices, choosing the first channel that comes in handy. However, as soon as emotional valence increases, people resort to more deliberate choices, weighing up the (dis-) advantages of available media and how they serve their own or others' motives. In highly emotional situations, though, it appears that symbolic reasons come into play, predefining socially appropriate and nonappropriate choices, and motive-based selection can be eventually "over-ruled". Of course, this hypothetical relationship has to be further investigated based upon concrete assessments of socio-emotional importance.

Moreover, the exact motives ought to be further investigated, since we were not able to scrutinize the statements according to underlying approach and avoidance motives. This could be pursued with more in-depth qualitative methods, e.g., via ladder interview techniques [56] or with quantified assessments by applying rating scales to measure the extent to which people avoid negative outcomes (i.e., losses and nongains) and approach positive outcomes (i.e., gains and nonlosses) in the respective situations. The same methodological approach would also contribute to a more specific assignment of reasons to the sending or receiving and self or other categories. While some freedom for individual elaboration is lost this way, participants could be asked distinctively how certain channels would affect their or the other's sending and receiving processes and which consequences are decisive for their choice.

The aforementioned symbolic choices circling around social acceptability also point towards another starting point for further inquiry, namely the psychological processes at the receiver's end. While we focused on the sender and what considerations take place before the actual interaction, the receiver in consequence is confronted with the medium the sender chose, although it might not be in accordance with his or her own current needs, causing a unilateral impairment of interaction experience. Moreover, the receiver is likely to conclude the sender's underlying intention from the channel he or she chose and react accordingly. Actually, reactive switching of communication channels is a frequently observed communication strategy, especially in highly emotional situations [1,57] that indicate an existing discrepancy between communicators' motives and illustrates the importance of understanding both sides and how technology corresponds to that.

The introduced framework can provide research with a tool to understand users' motives in CMC. Crucial motives can be uncovered by directing attention to questions such as: What aspects of communication does a user want to avoid and what to attain? Which for oneself and which for the receiver? Which of them concern the sending and which the receiving process of communication? How could media characteristics provide the user with control over these aspects? Some examples of how to address the answers to these questions in design are laid out in the following section.

### 5.2.2. Implications for HCI Practice and Design

Besides these research implications, the present study and its framework also provide starting points and critical considerations regarding application in HCI practice. We followed an approach where we started from a phenomenological perspective, that is, which channels people choose and what characteristics they carry, and concluded on the underlying motives they serve. In order to design a positive experience, one might follow this process the other way around. Practitioners could identify which psychological needs users might perceive in a specific context and provide them

with opportunities to act in accordance with those motives by tailoring technologies to the intended experience. For example, at this point in time, where more people than ever are forced to work from home due to a pandemic, the use of communication media becomes even more significant for individual wellbeing, and while efficient information transfer is undoubtedly important, socio-emotional aspects of communication cannot be neglected. Employers can support their employees with the possibility to fulfill their psychological needs by providing them with several tools that serve the control motives discussed here—or even design a single tool with options to customize communication according to present motives. By shifting the perspective away from functionalities towards pursued intentions, respective technologies could thus be adapted in a way that serves its user's needs and bolsters positive user experience, ideally without resulting in detrimental effects on the communication itself (e.g., facilitating misunderstandings, failed resolutions, or suppressing positive emotions).

To illustrate this, we can refer to a widely used instant messaging application, WhatsApp messenger, as an example of how a motive-based perspective can enrich the understanding of how people interact with communication media and what implications for their design can be derived. Our study revealed text-based communication as a frequently applied means for avoidance under negative circumstances since it provides the time to deliberately construct messages and edit them before transmission. However, there are two features that might contradict this motive, namely the visual display that the other is currently writing and a notification as soon as one has read a transmitted message. Both features can increase perceived time pressure, counter-acting the advantage one might pursue by using this medium. On the other hand, the application also provides a positive example for the reconciliation of two motives with its voice messaging feature since it gives users time to prepare their message while also employing the ability of speech to convey their current state through oral modulation, underlining their sincerity and evoking empathy in the receiver. However, as of today, it is not possible to prerecord messages and listen to them beforehand, a feature that could be recommended based on the consideration of user's motives. The prototype of KinChat, although developed with privacy concerns in mind, can be seen as another example of how such motives could be reconciled [58]. This messaging tool augments text messages with visualizations of the user's facial expression and head movement, and thereby allows the user to avoid direct exposure while sustaining some of the advantages of emotional display.

Another opportunity for the design of technologies lies in the simultaneous consideration of receivers' needs. For example, our results yielded the question of how two certain motives, one self- and one other-oriented, could both be addressed in the communication of positive messages. Some people appreciated the advantage of asynchronous communication media to capture their feelings in the heat of the moment and immediately transmit it, even if the other is currently not available, thereby somehow conserving the experience for the receiver. On the other hand, this deprives them of the other's reaction when receiving the content, missing out on what would have been a pleasant experience for themselves. Conversely, if they would wait for the other person to be available, the intensity of their initial reaction might fade in the meantime. Finding a solution for such problems can be a prolific endeavor for HCI practice. David [59], for instance, developed a prototype that processes text messages beforehand and mirrors the receiver's assumed reaction to the user. This might cause the sender to refrain from using text-based channels that might have detrimental effects on the communication outcomes (e.g., the message might be perceived even more negative) [60]. Reflecting a message's assumed impact on the receiver to the sender could help raise awareness for the other and, in turn, affect the sender's media choice. Once again, this illustrates how a motive-based perspective, especially one that considers both involved, can contribute to the development of technologies that reconcile several users' motives and nurture interaction.

Finally, while an intention to maintain control over the communication process might sometimes appear selfish, that does not mean that people actually intend to distance themselves from others. The desire to reduce emotionality and allow for a more deliberate choice of words regarding specific topics does not disentangle one from the basic human need for connection. Several innovative concepts

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can be found in HCI research that help to establish relatedness between people that are connected through technology—but without a back-and-forth of words [61–63]. These might also serve as starting points in order to develop technologies that reconcile basic human needs with situationally active motives in CMC.

*5.3. Limitations*

The present study established an alternative approach to media choice by shedding light on underlying psychological motives in order to understand how people choose between different communication media. While this led to the emergence of several profound insights about the reasons for media choice, it is just one step further towards their integration into existing theoretical and empirical works.

First of all, we initially applied a theoretical framework derived from earlier research that guided our analysis. Although it proved to be a useful tool to structure and interpret the data, there is a chance that the taken perspective led to the nonconsideration of additional influencing factors and alternative interpretations, even though we considered previously not specified categories (i.e., pragmatic and symbolic reasons).

Furthermore, our framework builds on a broad conception of richness and synchronicity diverging from the multifaceted MRT and MST. For example, while MST's rehearsability and immediacy of feedback are represented in the interaction control sending and receiving category, respectively, reprocessability apart from the actual communication process is not covered. Similarly, MRT's multiple cues and natural language are not distinguished within our emotion control categories, and personal focus could have hinted towards our symbolic category beforehand. While we consider our user-centered understanding suited to design products, it might further benefit from the inclusion of these nuances from MRT and MST. Similarly, we did not link different channels with groups of reasons, which is why some universally applicable relations between specific reasons and certain channels might have been undiscovered.

Moreover, our research design aimed at the collection of a large amount of open answers from many different people in order to cover a wide range of possible reasons guiding media choice. However, the data consequently differed in width and depth depending on each participant's willingness to elaborate on their thought process. A follow-up study establishing in-depth interviews with fewer participants would allow for a more thorough inquiry and might provide a better picture on how people weigh different options against each other instead of only asking why they would choose the medium they did. Additionally, the rather young and predominantly female sample might yield questions concerning the generalizability of results.

Another limitation pertains to the use of vignettes in order to elicit reactions from the participants. For one thing, responses to such hypothetical scenarios always have to be handled with caution when making conclusions about actual behavior. Secondly, we deployed those vignettes with the intent to cover a wide spectrum of emotionally engaging message content and to provide instances participants could relate to. This came with a lack of certainty regarding conclusions about the relation between positive and negative incidents and associated reasons for media choice. More specifically, socio-emotional communication is far from manifold to expect that these descriptions could serve as a means to induce the entirety of motives that might emerge in everyday communication or account for the multifacetedness of emotions. Further research should include more controlled and pointedly varied vignettes and more nuanced emotions rather than an abstract distinction between positive and negative valence. For example, anger and fear are both emotions of the same valence but can influence judgements about the risk of future events in different ways, with anger relating to optimistic and fear to pessimistic risk perception [64]. By specifically addressing either anger or fear within separate vignettes, angry people might prefer channels that allow for direct confrontation because of their more optimistic expectations compared to people in the fear condition.

The same issue of vagueness pertains to the not specified receiver, though varying relationships [32] could affect how self-oriented senders choose their communication channels for negative messages. For example, in close relationships, people might choose channels with the intention to solve potential conflicts and preserve the relationship, while less close individuals would act under the short-term premise of simply preventing conflict [65]. Similarly, hierarchical status relations [29] might also play a role, such that people are more focused on positive impression management capabilities with their superiors and more concerned by the objective presentation of information with equal and lower status coworkers. Overall, these spaces for interpretation within the vignettes, as well as differences in participants' personalities, might provide an explanation for the lack of consistency in preferred media and given answers under similar circumstances.

Finally, the viability of the present framework as an inspiration for design still needs practical testing and validation. In this vein, it also has to be noted that even if technologies are designed in a way that could support a particular desired experience (e.g., socio-emotional communication), people might still act in contrast to the supposedly best way—either because they do not recognize which channel might be optimal for their purpose (and their receiver) or they are aware of it but refrain from it due to strategic reasons (e.g., rather accept an escalation of conflict than disclose face-threatening information). While the intentional "design for positive experience" is a first step, it also becomes clear that one can never directly design or guarantee a positive experience but only provide the (presumably) best basis for it. Still, people might also use technology other than intended and have other experiences than intended. However, people's creative appropriations of technology might also inspire new designs [66,67], and thereby add to an ongoing dialogue between design and insights from actual usage in everyday life.

## 6. Conclusions

The present research provides an alternative perspective on the underpinnings of media choice, especially for socio-emotional communication. We made the case for a motive-based approach that focuses on how people seek to instrumentalize media characteristics in order to influence communication processes in a deliberate way. While mere pragmatic considerations can still play a role in emotional situations and socially acceptable behaviors might narrow the amount of appropriate choices, there is substantial evidence that people use communication media to assert control over the interactional speed and emotional intensity of communication in order to approach pleasant and avoid unpleasant outcomes. The consideration of these psychological motives adds to existing research on how people interact with such technologies and points out opportunities for practical advancements in their design. After all, people are free to choose the way they want to communicate, but HCI research and practice can contribute to everyday communication by addressing their motives and foster positive user experience and wellbeing.

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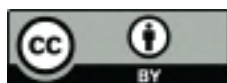
**Table S1: Vignettes**

| | | Locus | |
| --- | --- | --- | --- |
| | | **Self** | **Other** |
| **Valence** | **Negative** | Think for a minute about a topic, issue, or incident that would undermine how the other person thinks about you. For example, it could be a discussion about<br>- you failing to meet his or her expectations,<br>- you doing something morally distasteful,<br>- you holding an opinion you know the other person would find repugnant,<br>- you being disloyal toward the other person, etc. | Think for a minute about a topic, issue, or incident that would undermine how you think about the other person. For example, it could be your knowledge about<br>- his or her failure to meet your expectations,<br>- him or her doing something morally distasteful,<br>- him or her being disloyal toward you,<br>- you revealing your unhappiness with him or her, etc. |
| | **Positive** | Think for a minute about a topic, issue, or incident that would enhance how the other person thinks about you. For example, it could be<br>- a significant achievement by you,<br>- you revealing highly positive feelings toward the other person,<br>- you proposing something you know the other person would love, etc. | Think for a minute about a topic, issue, or incident that would enhance how you think about the other person. For example, it could be<br>- news of his or her significant achievement,<br>- his or her admirable behavior in a difficult situation,<br>- a demonstration of his or her loyalty toward you, etc. |

**Table S2: Coding Scheme**

| # | Main Category | Subcategory I / Focus | Subcategory II / Process | Definition | Examples |
|---|---|---|---|---|---|
| | *Reasons* | *Focus* | *Process* | *Answers containing …* | |
| **1.0** | **Interaction Control** | | | … time-based reasoning | "immediacy", "interactivity", "delayed", "direct", "time to" |
| **1.1** | | **Self** | | … time-based, self-oriented reasoning | "gives me time" |
| **1.1.1** | | | **Sending** | … time-based, self-oriented reasoning about the sending process | "gives me the opportunity to formulate a message" |
| **1.1.2** | | | **Receiving** | … time-based, self-oriented reasoning about the receiving process | "I can ignore a response" |
| **1.2** | | **Other** | | … time-based, other-oriented reasoning | "directly react to the other person" |
| **1.2.1** | | | **Sending** | … time-based, other-oriented reasoning about the sending process | "other has to answer me" |
| **1.2.2** | | | **Receiving** | … time-based, other-oriented reasoning about the receiving process | "other person has to face the problem" |
| **2.0** | **Emotion Control** | | | … cue-based reasoning | "mimics", "authentic", "not see each other", "emotion", "joy", "sorrow" |
| **2.1** | | **Self** | | … cue-based, self-oriented reasoning | "it feels unpleasant" |
| **2.1.1** | | | **Sending** | … cue-based, self-oriented reasoning about the sending process | "best way to express myself" |
| **2.1.2** | | | **Receiving** | … cue-based, self-oriented reasoning about the receiving process | "better to detect other's emotions and feelings" |
| **2.2** | | **Other** | | … cue-based, other-oriented reasoning | "other might dislike eye-contact" |
| **2.2.1** | | | **Sending** | … cue-based, other-oriented reasoning about the sending process | "lets other person convey his or her emotion" |
| **2.2.2** | | | **Receiving** | … cue-based, other-oriented reasoning about the receiving process | "other person receives more clearly" |
| **3.0** | **Pragmatic Reasons** | | | … pragmatic reasoning | |
| **3.1** | | **Convenience** | | … reasoning about the ease of use, accessibility and practicality | "it is simple" |
| **3.2** | | **Habit** | | … reasoning about established patterns of behavior | "the only way I communicate" |
| **4.0** | **Symbolic Reasons** | | | … reasoning about social norms and interpretation of choice | "right thing to do", "appropriate", "shows appreciation" |

**The Buffer Effect:**

**Strategic Choice of Communication Media and the Moderating Role of Interpersonal Closeness**

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## Abstract

The mediating nature of communication technologies (e.g., telephone, voice message, or chat) can "buffer" the experience of conversations by establishing a figurative shield between sender and receiver. From a psychological perspective, this buffer effect may affect senders' communication channel choices depending on their respective communication goals. Building on the impression management model of strategic channel use (O'Sullivan, 2000), we examine how valence and locus of a message and the interlocutors' relationship lead to differences in the buffer effect people establish through their channel choices. In two vignette-based, mixed-design studies, participants indicated which channel they would choose to communicate with a receiver in different situations, depending on the valence of the episode (positive vs. negative; study 1 and 2), who is at the center of the issue (self vs. other; study 1 and 2), and their interpersonal closeness (friend vs. acquaintance; study 2). In study 1, people chose channels with a higher buffer effect for negative (vs. positive) issues and episodes that focused on themselves (vs. the receiver). Study 2 supported a moderating effect of relationship. While people still chose channels with higher buffer effects for negative (vs. positive) issues in the acquaintance condition, the opposite was true when people were to communicate with friends. We attribute this to the higher salience of relational compared to self-presentational communication goals under increasing interpersonal closeness. The present studies expand the impression management model by focusing on the subjective buffer effect of communication channels and introducing the decisive role of relationship in its application.

*Keywords:* buffer effect, media choice, interpersonal closeness, relationship, communication goals

**The Buffer Effect:**

**Strategic Choice of Communication Media and the Moderating Role of Interpersonal Closeness**

The text message — I understand it when a coach wants a different player (…) but there are ways of going about it. You don't do it by text message. You should be honest and direct to someone's face. (…) I was showing it to my team-mates and they could not believe how he had done it. (Crafton, 2017, para. 36–38)

This quote from an interview with Diego Costa captures the soccer player's disappointment with his dismissal. Regardless of whether he expected to be released or not, Costa, as well as his teammates, felt that a text message was an inappropriate way of releasing someone. After all, face-to-face communication is widely considered the ideal way to end relationships: it allows for a conversational back-and-forth, the transmission of non-verbal cues, and extensive explanations (Gershon, 2008).

But on the other hand, Antonio Conte, his coach at that time, found himself in a difficult situation. Conveying negative messages is never easy and comes with a certain distress. People tend to anticipate receivers' reactions and therefore hesitate to share such messages—also known as the MUM effect (keeping Mum about Undesirable Messages) (Rosen & Tesser, 1970; Tesser & Rosen, 1975). Releasing Costa via text message instead of talking to him might have buffered Conte's distress, since mediated communication channels offer a less threatening environment to deliver negative content (Derks & Bakker, 2010; Kafetsios et al., 2017; Watts, 2007).

Such discrepancies between receivers' expectations and senders' channel choices yield the question of how people decide between available channels in the face of challenging interpersonal communication—if senders' choices actually do reflect an intention to "buffer" the communication experience and whether this varies depending on people's relationships.

In the present work, we build on the impression management model of strategic channel use (O'Sullivan, 2000). But instead of "lumping all forms of computer-mediated communication (CMC)

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together or considering diverse channels in a monolithic fashion" (p. 1), what Fox and McEwan (2017) criticized previous research for, we focus on how people experience a certain characteristic of different communication channels, namely, their subjective buffer effect. Although approaches like media richness or social presence theory also highlight specific characteristics and affordances of different communication channels, they are seldom appropriately operationalized in study design (Fox & McEwan, 2017). It is rarely tested if, and when, people's individual perception and theoretically assumed experiences are actually reflected in choices of communication channels.

In a first study, we adapt the work of O'Sullivan (2000) but account for some shortcomings of the original design and integrate the notion of a subjective buffer effect of communication channels. In the second study, we introduce a crucial variable, not explicitly considered in the former model, by exploring the influence of interpersonal closeness. Based on our observations, we theorize about an underlying shift from self-presentational to relational communication goals. But first, we present a concise summary of the impression management model, interactional control through channel choice, and the potential role of interpersonal closeness.

**The Impression Management Model**

We predicate our work upon a theoretical framework that applies to the strategic choice of communication channels: O'Sullivan's (2000) impression management model (IMM). It builds on the premise that impression management, i.e., the attempt of individuals to influence what others think about them, is a key component of interpersonal interactions (Goffman, 1959; Schlenker, 2013) and that the choice of communication channel is one interactional strategy to achieve this. Briefly, the IMM proposes that people's preference for mediated channels increases as soon as a communication episode threatens one's self-presentation, since those channels provide more control over the exchange of information (Ledbetter & Herbert, 2020).

In more detail, the model focuses on all instances where the own or a relational partner's self-concept is potentially threatened or supported, labeled *self-presentationally relevant episodes*. Such an episode is characterized by its *valence* and *locus*, that is, whether the episode is perceived positive or negative (i.e., valence) and whether the issue impacts the presentation of oneself or the other (i.e., locus). Based on these factors a communication goal is formulated under the premise of *maximizing rewards* and *minimizing costs*. To pursue this goal, the model proposes that the sender adapts the message's content accordingly and chooses the communication channel on basis of its *symbolic meaning* (e.g., email as a formal, text messaging as an informal medium), own *social skills* (i.e., the general ability to handle interactions over a specific channel) and the *interactional control* a channel provides (e.g., the capacity to control the duration and nature of exchanged information). Following the communicative act, the episode is evaluated by those involved and, in turn, evaluations of their relationship and respective self-concepts are shaped. In support of the model, an initial investigation (O'Sullivan, 2000) showed people's preferences for CMC over face-to-face conversation when they imagined an episode that could threaten a positive impression (i.e., negative valence) and when the issue was of concern to their own rather than the partner's image (i.e., self-locus).

Feaster (2010) later advanced this model by not focusing on channel features themselves but on each individual's ability to exercise information control via the channel in order to maintain *face*, i.e., their desired personal image (Goffman, 1959). Every interpersonal interaction can potentially affect an involved person's face (Brown & Levinson, 1987) but people differ in their individual competence to exert expressive control (i.e., ability to control the flow of revealed information) and privacy control (i.e., ability to withhold information) over a certain channel in face-threatening acts (Feaster, 2010).

**Interactional Control and Communication Goals**

Channel choice as a means to strategically control interaction has been the focus of several works in the past (Bülow et al., 2019; Kayany et al., 1996; Tretter & Diefenbach, 2020). However, while

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O'Sullivan (2000) and especially Feaster (2010) emphasized the value of channels for active self-presentation, there is also a receiving role in communication. For example, sending negative content via email offers the opportunity to deliberately craft responses (due to its asynchronous nature) but it may also attenuate the experience of receiving distressing responses (due to the lack of non-verbal cues).

Accordingly, communication channels may also vary in their ability to shield oneself from the other and avoid direct exposure (Riordan & Kreuz, 2010). O'Sullivan (2000) already mentioned this shielding capacity that "would help insulate the interaction initiator from the distressing reactions" (p. 414), labeling it a "buffer" effect (Derks & Bakker, 2010; Sussman & Sproull, 1999; Watts, 2007; Wotipka, 2016). We aim to add to works on the IMM by applying a subjective buffer effect measure that also accounts for this channel capacity while considering that not all channels are equally able to avoid exposure (video chat, for example, might even be perceived more exposing than real-life conversations).

To this end – and in line with the rationale that people perceive channels differently and vary in their ability to utilize them for communication purposes (J. R. Carlson & George, 2004; Feaster, 2010; Markus, 1994) – we will not compare people's channel choices per se but the buffer effect each individual attributes to the chosen channel. Basically, we presume that this subjective buffer effect is determined by an individual's general perception of a communication channel. Contextual factors, however, contribute to whether a channel with a relatively high or low subjective buffer effect is chosen.

According to the IMM, people choose channels strategically when an episode potentially affects their own or the partner's self-presentation. However, besides self-presentational goals, relational goals (e.g., to maintain or escalate a relationship) are a key aspect of interpersonal communication as well (Canary et al., 2008). Moreover, mutual concern for both partners and the constructed image of the relationship is inadequately represented within the model, given the association of mutual concerns with the likelihood of using a certain channel in interpersonal conflicts (Ledbetter & Herbert, 2020).

Accordingly, we intend to account for such relational communication goals by considering interlocuters'

interpersonal closeness in our approach.

**Research Approach and Propositions**

Our research examines interpersonal communication situations that hold the potential to elicit

self-presentational as well as relational communication goals. To provide a better understanding of

people's channel choices in those situations, we focus on the subjective buffer effect of communication

channels instead of their allegedly objective characteristics. To this end, we build on the IMM

(O'Sullivan, 2000) but extend the original study by investigating whether people's channel choices

actually reflect differences in buffer effects (study 1) and by examining variation depending on the

relationship between the persons involved (study 2). While O'Sullivan lumped preferences for all CMC

channels together, we follow a characteristic rather than holistic approach (Fox & McEwan, 2017;

Westerman et al., 2019; Westerman & Westerman, 2013), that also accounts for changes in channel

perceptions over the last two decades. Conceptually, we apply the IMM's classification of episodes along

the general dimensions of valence (i.e., positive or negative) and locus (i.e., affecting the own or the

other's self-presentation). Their combination leads to four possible situations labeled "confess",

"boost", "accuse" or "praise" (see Table 1).

*Insert Table 1 here*

Our research is predicated on two central propositions stemming from the literature outlined

above. First, people attribute different buffer effects to the same channels. Therefore, we compare

channel choices based on their individually assigned buffer effect instead of channel choices themselves.

Second, depending on the message (i.e., valence and locus) and the relationship with the receiver (i.e.,

interpersonal closeness), people pursue different communication goals (e.g., self-presentational,

relational), for which a buffer effect is more or less advantageous. Thus, differences in situational characteristics (and underlying communication goals) should be represented in the subjective buffer effect of the channel an individual chooses, as further explicated below.

### Valence of the Episode

Research on the MUM effect is pertinent to propositions about the effect of positive and negative messages on channel choice. It proposes essentially two main explanations for people's unwillingness to transmit bad news: *public* presentation or *private* discomfort (Bond & Anderson, 1987; Dibble, 2018). On the one hand, people might be reluctant to share bad news due to their fear of being evaluated negatively by the recipient (i.e., *public* explanation), while, on the other hand, they might hesitate since they feel bad about eliciting negative affect in the receiver (i.e., *private* explanation). Although there is also research indicating private discomfort and a concern for the other, a majority of studies supports the former (Dibble, 2018). More importantly, the delivery of bad news can pose a threat to the face of the sender as well as the receiver (Dibble et al., 2015). Mediated channels might buffer such inherent face-threats, as people were shown to communicate more accurately and honestly over computer-mediated communication than face-to-face (Sussman & Sproull, 1999). On the other hand, in the case of positive news, the communication channel may be moot (Dibble, 2018; Sussman & Sproull, 1999), people might even seek a more immediate experience (Tretter & Diefenbach, 2020). We expect this to be represented in the choice of channels with a higher buffer effect in negative episodes.

H1: Senders choose communication channels with a higher subjective buffer effect in negative (vs. positive) interpersonal communication situations.

### Locus of the Issue

Assumptions about the buffer effect's role in episodes of different locus are somewhat less obvious, since face-relevant situations might always affect both parties' self-presentation. However, in negative situations, we assume that people choose channels with a higher buffer effect for self-locus

than other-locus situations for two reasons: first, the negatively valenced episodes of our paradigm, "confess" and "accuse", represent two instances which Brown and Levinson (1987) characterize as primarily threatening the speaker's or the hearer's face, respectively (Wilson et al., 1998). Second, people reportedly feel more reluctant when they are themselves the locus of the situation (Dibble & Sharkey, 2017). Regarding positive situations, we expect a similar effect of locus for another two reasons: first, Brown and Levinson (1987) compared the face threat of bringing good news about oneself (because it also indicates little care for the other) with the delivery of bad news about the recipient, an act which reportedly elicits reluctance. Second, although compliments (or "praises") are face-enhancing for the receiver, self-praise (or "boost") poses a threat to the sender's face by appearing egocentric (Matley, 2018). Channels with higher buffer effects are supposed to mitigate the outlined face-threats predominating in self-locus episodes.

H2: Senders choose communication channels with a higher subjective buffer effect in interpersonal communication situations that focus on themselves (vs. the receiver).

### Relationship of the Interlocuters

Considering the impact of closeness on the choice of channels, we expect analogous valence and locus effects in distant relationships, since the basic tendencies outlined above presumably remain unaltered by a decline in closeness. In close relationships, however, the concern for self-presentation decreases (Brown & Levinson, 1987), self-oriented motives fade (Dubois et al., 2016), and the transmission of bad news is more likely (Weenig et al., 2001). Moreover, a concern for the relationship itself, instead of self or other, might be decisive in close relationships (Ledbetter & Herbert, 2020), leading to the avoidance of "buffering" media out of considered appropriateness (Westerman & Westerman, 2010; Westerman & Westerman, 2013), moral responsibility (Weenig et al., 2014) or as a means to signal the strength of the relationship (Dibble & Sharkey, 2017). Thus, although reluctance in the delivery of bad news has also been reported equally for friends and strangers (Dibble & Levine,

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2013) and different channels (Dibble, 2018), we do not expect this reluctance to be represented in the actual choice of channels. On the contrary, we even assume channel choices with a lower buffer effect for negative (versus positive) messages in close relationships. More specifically, we suppose that people do not primarily focus on short-term benefits (e.g., buffering negative conversations) but what seems adequate to preserve the close relationship in the long run (e.g., upright conflict resolution). Therefore, in close relationships, a subjectively less-buffered communication process might seem even more desirable for negative than positive messages.

H3: There is an interaction effect between the valence of the episode and interpersonal closeness on channel choice.

H3a: In distant relationships, senders choose communication channels with a higher subjective buffer effect in negative (vs. positive) interpersonal communication situations.

H3b: In close relationships, senders choose communication channels with a lower subjective buffer effect in negative (vs. positive) interpersonal communication situations.

Assumptions on the potential interplay between closeness and locus are considerably more tentative due to the lack of empirical studies considering both. However, as the locus hypotheses mainly build on the protection of self-face and since face concerns are less salient in closer relationships (Brown & Levinson, 1987), we do expect these particular locus effects only to appear in distant relationships. In closer relationships, however, where the self-other distinction fades (Aron et al., 1992), we expect an increasing focus on the mutually held image of the relationship (Ledbetter & Herbert, 2020) and less use of channels' self-presentational advantages (Ruppel, 2015). Therefore, we propose a shift towards choices with a lower buffer effect for self-locus episodes, as this symbolically conveys the importance of the relationship (Dibble & Sharkey, 2017; Ledbetter & Herbert, 2020), all the more in cases of confessions. We assume a similar shift in positive episodes with friends, since face concerns (e.g., the

fear of appearing egocentric) drop and one might be more inclined to reduce buffering when receiving

praise than when praising others.

H4: There is an interaction effect between the locus of the issue and interpersonal closeness on

channel choice.

H4a: In distant relationships, senders choose communication channels with a higher subjective

buffer effect in interpersonal communication situations that focus on themselves (vs. the receiver).

H4b: In close relationships, senders choose communication channels with a lower subjective

buffer effect in interpersonal communication situations that focus on themselves (vs. the receiver).

Study 1 closely follows the design of O'Sullivan (2000) (i.e., varying valence and locus) to test

how the initial study transfers to today's conditions and whether people's channel choices generally

reflect differences in buffer effects (hypotheses 1 and 2), before a relationship variation is added in

study 2 to examine hypotheses 3 and 4 regarding interpersonal closeness.

**Study 1**

**Method**

***Experimental Design***

Study 1 applied a 2 (valence: positive vs. negative) x 2 (locus: self vs. other) within-subjects

design and was conducted online. The four vignettes used by O'Sullivan (2000) were translated to

German and slightly adapted to describe episodes of communication with a friend. For example, the

vignette in the "confess" condition read the following: "Think for a minute about a topic, issue, or

incident that would undermine how a friend thinks about you. For example, it could be a discussion

about you failing to meet his or her expectations, you doing something morally distasteful, you holding

an opinion you know your friend would find repugnant, you being disloyal toward your friend, etc."

***Participants***

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Participants were recruited via institutional mailing lists containing students and working

people. A total of 122 participants (31% male, 69% female), aged between 17 and 63 years (*M*=26.87;

*SD*=10.13; *Med*=24), completed the online survey. Students received course credit for their

participation, while other participants could take part in a lottery for five 10€ Amazon vouchers.

*Procedure*

After confirming an initial consent agreement, participants were introduced to the upcoming

procedure. They were presented with each of the four vignettes in a randomized order. For each

vignette, they subsequently indicated which communication channel they would choose and provided

an affect rating of the previously encountered situation. After all four vignettes were completed,

participants rated each of the available communication channels according to their subjective buffer

effect. Since we presume that individual perception of a channel's buffer effect does not substantially

vary across contexts, this assessment was conducted independently of the actual decision situations

(Feaster, 2013). Finally, participants reported basic demographic data (age, gender).

*Measures*

**Channel choice.** Participants were given seven different communication channels to choose

between: "email", "text message", "instant messaging / chat (e.g., WhatsApp, Threema, Facebook

Messenger)", "voice message / voice mail (e.g., voice messaging services, mobile phones' mailbox,

answering machine)", "telephone", "video chat (e.g., Skype, Facetime)" or "face-to-face conversation".

The rationale behind this selection was to provide participants with the most common ways of

communication while covering a broad spectrum of potentially varying buffer effects.

**Subjective buffer effect.** Six items (see Appendix) were used to assess the buffer effect

participants attribute to the available communication channels on a scale from 1 (="not at all") to 5

(="very much") (Wotipka, 2016). Reliability analyses yielded acceptable to mainly good internal

consistencies for overall buffer scores of each available channel (see Table 2).

*Insert Table 2 here*

**Affect.** To obtain insights into the affective reaction that we expected the vignettes to induce, a nine-point scale version of the self-assessment manikin scale (SAM) was applied (Bradley & Lang, 1994). This well-established measure comprises three facets of affective experience (pleasure, arousal, dominance). Instead of using verbal anchors, affect is assessed by allocating each point of the scale to an abstract pictorial representation of intensity. For example, the pleasure scale starts with a picture of a frowning face and ends with a happily smiling figure, while the middle of the scale indicates a neutral state. Depending on the valence of the episode, participants should report different degrees of pleasure, i.e., higher pleasure for positive ("boost", "praise") compared to negative episodes ("confess", "accuse"). Depending on the locus of the message, participants should report different degrees of arousal, i.e., higher arousal for self-related ("boost", "confess") compared to other-related messages ("praise", "accuse"). Therefore, the SAM was used to assess the validity of the applied vignettes by assessing affective states (e.g., unpleasant arousal in negative, self-related situations) that we assume might underlie people's consideration of subjective buffer effects.

**Results**

Initially, the self-assessment manikin scales were consulted to examine if affective reactions varied across vignettes as expected. The mean pleasure values for the confess ($M$ = 2.66, $SD$ = 1.48) and accuse conditions ($M$ = 3.29, $SD$ = 1.53) were significantly lower than for the boost ($M$ = 7.53, $SD$ = 1.75) and praise conditions ($M$ = 7.64, $SD$ = 1.57), $F(1, 120)$ = 568.07, $p < .001$, partial $\eta^2$ = 0.83. Furthermore, participants were more aroused when the issue focused on themselves (confess: $M$ = 6.46, $SD$ = 1.97; boost: $M$ = 4.45, $SD$ = 2.28) than when it focused on the other (accuse: $M$ = 6.06, $SD$ = 1.88; praise: $M$ =

3.85, $SD$ = 1.91), $F(1, 119)$ = 15.62, $p$ < .001, partial $\eta^2$ = 0.12. Taking together these patterns of reported

pleasantness and arousal, the manipulation led to the expected effects on participants' affective states.

Table 3 shows the frequencies of choices and descriptive statistics of subjective buffer scores for

each communication channel within the four experimental conditions. An initial visual inspection

already indicates that the tendencies suggested by the IMM (e.g., more CMC for negative vs. positive

messages) are not necessarily reflected in the mere channel choice frequencies, but in the affordances

these channels provide, i.e., their subjective buffer effects. For example, the mean buffer scores across

chosen channels are mostly higher in the negative than positive valence conditions, indicating a

tendency towards choices that come with a higher subjective buffer effect.

Furthermore, since an individual's choice of the same channel in several situations would always

come with the same buffer, differences between situations allow for interesting comparisons between

groups. For example, those participants who chose email in negative situations (i.e., confess, accuse)

might also generally associate a higher buffer effect with it than people who chose the same channel in

positive valence situations (i.e., boost, praise).

Taken together, this indicates that people may differ in their individual perception of the same

channel, but congruently choose a channel that – for them – comes with a higher buffer effect in

negative situations. Accordingly, the buffer effect could be more informative than the channel itself to

explain choices in interpersonal communication situations.


*Insert Table 3 here*


The following statistical analysis explored this psychological pattern on a more general level. To

this end, we conducted a two-way repeated measures ANOVA that considers the buffer effect people

associate with their choices rather than simply comparing choices themselves. In line with H1, there was

a statistically significant main effect of valence, $F(1, 121) = 9.42$, $p = .003$, partial $\eta^2 = 0.07$, indicating that people chose a communication channel with a higher buffer effect when communicating negative messages ($M = 2.45$, $SE = 0.07$) vs. positive messages ($M = 2.25$, $SE = 0.07$). Furthermore, in line with H2, a significant main effect of locus emerged, $F(1, 121) = 4.28$, $p = .041$, partial $\eta^2 = 0.03$, implying that people chose channels with a higher buffer effect for communication focusing on themselves ($M = 2.41$, $SE = 0.07$) rather than the receiver ($M = 2.29$, $SE = 0.07$). There was no significant interaction effect between valence and locus of the message, $F(1, 121) = 0.06$, $p = .813$, partial $\eta^2 < 0.01$.

**Discussion**

While former research on the buffer effect typically considered CMC as one single category in contrast to face-to-face conversations, our study applied a new and more differential approach. We treated communication channels separately according to the buffer effect each individual associates with them. In line with our hypotheses, participants tended towards communication channels with a higher buffer effect when they were to communicate negative messages (valence effect) and when the issue involved themselves (locus effect). We argue that this is due to the buffer effects' potential to avoid unpleasant experiences and achieve beneficial self-presentation. However, since communication inherently involves others, the interpersonal closeness between sender and receiver and activated relational goals might also play a role in senders' channel choices. Therefore, in a second step, we extended the research design and considered interpersonal closeness by including different kinds of relationships.

**Study 2**

**Method**

*Experimental Design*

We conducted an online experiment similar to study 1 but added the relationship between sender and receiver as an additional factor. This led to a 2 x 2 x 2 mixed design with valence (positive vs.

negative) and locus (self vs. other) as within-subject factors and interpersonal closeness (friend vs.

acquaintance) as the between-subjects factor. Two separate sets of the four vignettes adapted from

O'Sullivan (2000) were applied, one asking the participants to imagine communication with a close

friend and the other one communication with an acquaintance. Furthermore, participants only rated the

buffer effects of those channels they had previously chosen in at least one of the described situations.

### *Participants*

Participants were recruited via institutional mailing lists containing students as well as working

people and through Clickworker, a German-based crowd-working platform similar to Amazon

Mechanical Turk. Since there was no effect of data source on the key variables, the two samples were

collapsed. The initial sample consisted of 120 participants who completed the online survey in its

entirety. An attention check was inserted around the end of the survey, where participants were

instructed to *not* answer the then following question about their favorite communication media. 30

participants failed this attention check and were dropped from the sample, resulting in a data set of 90

participants (52% male, 48% female), aged between 18 and 68 years ($M = 33.70$, $SD = 12.39$; $Med = 30$).

Students could demand course credit for their participation. Among the remaining participants, a lottery

for six Amazon vouchers with a total value of 100€ was held.

### *Procedure*

Participants went through the same procedure as in study 1 but with one particular difference.

They were randomly assigned to either imagine a person they would label a close friend or an

acquaintance as the receiver throughout the survey. Subsequently, they rated their relationship on the

IOS scale (outlined below) and were then presented with the four vignettes. Finally, they rated their

chosen channels on the buffer scales and encountered the attention check described above.

### *Measures*

Measures were basically the same as those used in study 1, except for the removal of the SAM measurements. Reliability analyses for the subjective buffer scores of each communication channel yielded acceptable to excellent internal consistencies (see Table 4).

*Insert Table 4 here*

To check for the successful manipulation of interpersonal closeness, participants rated their relationship with the person they were going to imagine on the inclusion of other in the self scale (IOS) (Aron et al., 1992). This scale is a reliable measure of the subjective closeness of relationships (Gächter et al., 2015). The IOS scale offers a pictorial set of seven pairs of increasingly overlapping circles, each circle representing one person. Respondents are asked to evaluate their relationship to a specific individual by selecting the pair that best describes their perceived closeness.

**Results**

The IOS scores reported in the two different relationship conditions were analyzed to ensure a successful manipulation of interpersonal closeness. An intended significant difference between the acquaintance ($M$ = 2.89, $SD$ = 1.26) and the friend condition ($M$ = 4.21, $SD$ = 1.67) was attained, $t(77.69)$ = 4.20, $p < .001$, $d$ = 0.90.

*Insert Table 5 here*

The means and standard deviations of chosen channels' buffer scores in each of the four situations, split by relationship condition, are depicted in Table 5. An initially conducted three-way mixed ANOVA yielded no significant interaction effect of valence, locus, and relationship, $F(1, 88) < 0.01$, $p = .976$, partial $\eta^2 < 0.01$. We continued by testing our hypotheses regarding the two-way interaction

effects proposed in H3 and H4. In line with H3, there was a significant two-way interaction between valence and relationship, $F(1, 88) = 12.10$, $p = .001$, partial $\eta^2 = 0.12$. Participants in the acquaintance condition chose communication channels with a higher buffer effect for the conveyance of negative (vs. positive) messages (H3a), $F(1, 46) = 5.79$, $p = .020$, partial $\eta^2 = 0.11$. Conversely, participants in the friend condition chose channels with a lower buffer effect for negative (vs. positive) messages (H3b), $F(1, 42) = 6.80$, $p = .013$, partial $\eta^2 = 0.14$. Thus, results are in line with H3 regarding the interplay of valence and interpersonal closeness. However, contrary to H4, there was no interaction effect between relationship and locus, $F(1, 88) = 1.85$, $p = .177$, partial $\eta^2 = 0.02$. Participants did not choose channels with a higher buffer effect for messages that involved themselves (vs. the receiver) in the acquaintance condition (H4a), $F(1, 46) = 1.20$, $p = .280$, partial $\eta^2 = 0.03$. Neither did they choose channels with a lower buffer effect when messages focused on themselves (vs. the receiver) in the friend condition (H4b), $F(1, 42) = 0.70$, $p = .409$, partial $\eta^2 = 0.02$.

**Discussion**

Study 2 partially supported the assumed moderating influence of interpersonal closeness on the effects of valence and locus demonstrated in our first study. In distant relationships, analogously to study 1, people chose channels with a higher subjective buffer effect in negative episodes. As expected, the opposite was true in close relationships. However, there was no such interaction effect between the locus of the message and the kind of relationship, which contradicts our assumptions. The channels that people chose did not significantly differ in their buffer effect, regardless of whether people were addressing a close or distant other.

## General Discussion

Taken together, our studies support the assumption that people choose communication channels with varying buffer effects depending on the valence and locus of the message and their relationship with the receiver. Basically, they chose channels with a higher buffer effect when they were

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to communicate negative (vs. positive) content and when the issue involved themselves (vs. the

receiver). Thus, choices are in line with people's general reluctance to deliver bad news and the self-

presentational preferences proposed by the IMM. However, this was not the case in close relationships.

On the contrary, people even chose channels with a lower buffer effect in negative situations with

friends (while the initial observation held true for acquaintances). Those situations, in which a general

tendency is apparently interfered with by contextual factors, are particularly interesting. Our results

indicate that interpersonal closeness is such a determinant and that the decisive role of buffer effects

might fade in close relationships.

We attribute this to a relatively stronger concern for relational over self-presentational

communication goals in close relationships. This observation is congruent with recent research on the

IMM that suggests mutual – more than self or other – face concern to be the best predictor of channel

preferences in close relationship conflicts (Ledbetter & Herbert, 2020). Two (not mutually exclusive)

explanations are conceivable: First, self-presentation concerns are less salient in close relationships

(Brown & Levinson, 1987; Schlenker, 2013) while a more genuine (i.e., less buffered) impression of each

other's reaction might support relationship maintenance (Frisby & Westerman, 2010; Westerman et al.,

2019). Second, since channel choices also hold symbolic meaning, choosing a channel with a lower

buffer effect may send a message in itself by signaling the personal value of the relationship (McLuhan,

2010; Westerman & Westerman, 2010). This notion of a channel's symbolic meaning is also

incorporated in the IMM but when this aspect becomes decisive has not been investigated yet.

Interestingly, in close relationships, people chose channels with a higher buffer effect for

positive messages. They maybe did so not because of their self-presentational upside, but out of

pragmatic reasons as the easiest way to let the other know (P. J. Carlson & Davis, 1998; Tretter &

Diefenbach, 2020). Although this could unintentionally buffer the positive experience, people may have

overestimated their own and their friend's ability to accurately share positive emotions this way

(Riordan & Trichtinger, 2017).

Moreover, the present study confirms the importance of determining the role of relationship in

the transmission of bad news (Dibble & Levine, 2013). The symbolic meaning explanation is in

accordance with the observation that people transmit bad news more often in closer relationships out

of moral responsibility (Weenig et al., 2001; Weenig et al., 2014). However, other studies found no

difference in MUM effects between friends and strangers (Dibble & Levine, 2013) or a higher preference

for mediated channels with strangers independent of valence (Johnsen et al., 2014). A possible

explanation might be that those studies dealt with strangers, not acquaintances, as a reference group.

Strangers are by definition unknown beforehand and probably not encountered afterward, which may

render those situations inherently different when examining interpersonal communication.

Considering research on communication channels for bad news, our study could be situated

between psychological (e.g., reluctance) and behavioral (e.g., sugarcoating) MUM variables. Maybe

people experience the same kind of reluctance regardless of the channel beforehand (Dibble, 2018) but

whether they actually choose a channel with a higher buffer effect depends on additional context

factors – like their relationship. The channel, in turn, then determines whether strategies like

sugarcoating are applied or if people communicate honestly and accurately (Sussman & Sproull, 1999).

Finally, our studies add to the literature by explicitly focusing on the individual's perception of a

channel instead of the channel itself, which should be more accurate to explain people's behavior

(Feaster, 2010; Fox & McEwan, 2017). Video chat, for example, is considered a leaner channel than face-

to-face conversations (J. R. Carlson & George, 2004). But it was rated less buffering in the present study,

possibly because of people's inexperience in its use or the emphasized facial exposure. Such subjective

measure approaches account for that and suggest that when people choose differently, the reason lies

beyond the channel itself. When this is also not due to differences in individual perceptions, then it can

inform further theorizing about the underlying decision processes – like an increasing dominance of

relational over self-presentational goals when bad news is for a close friend.

**Limitations and Future Research**

First, although vignette-based studies represent a well-established research design (Aguinis &

Bradley, 2014), participants knew that they would not actually communicate and might have been

biased by social norms (e.g., you ought not to fire employees via text message). This constitutes an

initial limitation of our studies and calls for more realistic settings to enhance the ecological validity of

found effects.

Second, study 2 revealed no effects of locus, possibly due to lower sample size, since effect sizes

were still similar to study 1. Moreover, we checked for successful closeness manipulation with the one-

item IOS Scale, which comes with lower reliability than more sophisticated approaches (Dibble et al.,

2012). Maybe the closeness induction was not powerful enough to yield anticipated interaction effects.

Third, while we implicitly assumed a shift from self-presentational goals to relation goals in

closer relationships, a qualitative investigation of underlying communication goals in the decision-

making progress should reveal if this was indeed the case. Moreover, a quantitative assessment of

receivers' preferences in the respective situations, as well as the congruence between choices and those

preferences in closer relationships, could support this rationale of a relationship-oriented decision.

Fourth, we applied a research paradigm where either sender or receiver was responsible for the

issue at hand, following the impression management model. Although disapproval and disappointments

are the most salient topics regarding the delivery of bad news (Dibble & Sharkey, 2017), externally-

rooted positive or negative messages could pronounce relational goals even more in a desire for joint

celebration or mutual comfort.

Fifth, two limitations pertain to the conducted buffer assessments. Study 2 only compared

buffer effects of channels that were chosen before, leaving the question unanswered if non-chosen

channels would have come with an even higher or lower buffer effect. Moreover, we measured the

subjective buffer effects of channels independently of the vignettes, i.e., after all decisions were made.

This does not allow to distinguish between subjective buffer effects in anticipation or retrospect of

people's choices and whether this varies systematically across situations. Taken together, those design-

related limitations call for an iterative and more exhaustive measurement in future studies.

Last, in the light of the present evidence for relationship effects, a more detailed assessment of

closeness seems crucial (Dibble et al., 2012) and further conceptions of relationships should be taken

into account, such as the vertical dimensions of status and social power (Hall et al., 2015).

### Conclusion

The present research contributes to the understanding of channel choices for interpersonal

communication by connecting the buffer effect of channels with the impression management model

and adding the influence of interpersonal closeness. The assumed shift from self-presentational to

relational goals and the corresponding use of channels' buffer effects might also help to explain daily-life

conflicts like the one we introduced this paper with. The cited soccer player would have expected a

different way of being informed of his dismissal, but his coach preferred a channel that allowed him to

formulate his message upfront and shield himself from an unpleasant reaction. Maybe he would have

acted otherwise if he had felt closer to his former employee. If the player, in turn, would have had a

more distant conception of their relationship, maybe he would have even appreciated the opportunity

to process this revelation by himself and not be engaged in any further interaction. One way or another,

the integration of interpersonal closeness can contribute to the understanding of communication

channel choice—and might even provide senders with the knowledge to make more considerate

choices.

**Research Transparency Statement**

The authors are willing to share their data, analytics methods, and study materials with other

researchers. The data is available at (preliminary link for review):

https://osf.io/b69xm/?view_only=9d914fcb88db434d9dd67cab1b804759.

Further materials will be available upon request.

**Preregistration Statement**

The authors have not preregistered this research.

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**Table 1**

*Classification of Situations by Valence and Locus*

| | | Locus | |
|---|---|---|---|
| | | Self | Other |
| Valence | Positive | "Boost" | "Praise" |
| | Negative | "Confess" | "Accuse" |

*Note*. Illustration adapted from O'Sullivan (2000).

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**Table 2**

*Descriptive Statistics of Buffer Scores for each Channel (Study 1)*

| Channel | n | M | SD | Cronbach's α |
|---|---|---|---|---|
| Email | 122 | 3.14 | 0.83 | .788 |
| Text message | 122 | 2.57 | 0.85 | .852 |
| Instant messaging / chat | 121 | 2.58 | 0.80 | .835 |
| Voice message / voice mail | 122 | 2.09 | 0.82 | .874 |
| Telephone | 122 | 2.05 | 0.78 | .840 |
| Video chat | 121 | 1.68 | 0.75 | .891 |
| Face-to-face | 121 | 2.03 | 0.84 | .800 |

*Note.* Five-point scale ("not at all" − "very much").

**Table 3**

*Frequencies (f) of Channel Choices and Buffer Scores for chosen Channels within each Condition (Study 1)*

| | Condition | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Confess | | Boost | | Accuse | | Praise | |
| Channel | *f* | *M (SD)* | *f* | *M (SD)* | *f* | *M (SD)* | *f* | *M (SD)* |
| Email | 9 | 3.48 (0.99) | 6 | 3.06 (1.14) | 6 | 3.25 (1.14) | 4 | 2.04 (1.29) |
| Text message | 2 | 3.17 (0.24) | 4 | 3.17 (0.69) | 3 | 3.02 (0.37) | 0 | n/a |
| Instant messaging / chat | 24 | 3.01 (0.65) | 33 | 2.82 (0.72) | 23 | 2.76 (0.83) | 25 | 2.62 (0.66) |
| Voice message / voice mail | 9 | 2.83 (0.47) | 9 | 2.00 (0.76) | 3 | 2.42 (0.35) | 5 | 2.71 (0.57) |
| Telephone | 13 | 2.46 (0.87) | 16 | 2.03 (0.78) | 12 | 2.71 (0.74) | 18 | 1.95 (0.83) |
| Video chat | 2 | 2.00 (1.41) | 3 | 1.83 (1.04) | 2 | 1.33 (0.47) | 6 | 2.22 (1.24) |
| Face-to-face | 63 | 2.12 (0.75) | 51 | 1.97 (0.84) | 73 | 2.14 (0.83) | 64 | 2.03 (0.86) |
| Overall | 122 | 2.50 (0.87) | 122 | 2.31 (0.90) | 122 | 2.39 (0.89) | 122 | 2.19 (0.87) |

*Note*. Five-point scale ("not at all" – "very much").

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**Table 4**

*Descriptive Statistics of Buffer Scores for each Channel (Study 2)*

| Channel | *n* | *M* | *SD* | Cronbach's α |
| --- | --- | --- | --- | --- |
| Email | 49 | 3.01 | 1.04 | .895 |
| Text message | 38 | 2.75 | 0.96 | .923 |
| Instant messaging / chat | 70 | 2.93 | 0.88 | .906 |
| Voice message / voice mail | 45 | 2.46 | 0.88 | .884 |
| Telephone | 68 | 2.44 | 1.01 | .910 |
| Video chat | 36 | 2.06 | 0.94 | .913 |
| Face-to-face | 74 | 2.20 | 0.81 | .780 |

*Note*. Five-point scale ("not at all" – "very much").

**Table 5**

*Means (Standard Deviations) of Buffer Scores for Valence (Positive/Negative), Locus (Self/Other), and Relationship (Friend/Acquaintance) (Study 2)*

| | | Locus | | | |
| | | Self | | Other | |
| Relationship | Valence | *n* | *M (SD)* | *n* | *M (SD)* |
|---|---|---|---|---|---|
| Friend | Positive | 43 | 2.89 (0.99) | 43 | 2.91 (0.88) |
| | Negative | 43 | 2.64 (0.97) | 43 | 2.73 (0.94) |
| Acquaintance | Positive | 47 | 2.60 (0.94) | 47 | 2.49 (0.91) |
| | Negative | 47 | 2.81 (0.91) | 47 | 2.77 (1.03) |

*Note*. Five-point scale ("not at all" − "very much").

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## Appendix

*Buffer Effect Items adapted from Wotipka (2016)*

1. This channel makes me feel like I am protected from the reactions of the other person.
2. This channel provides a "shield" for me to hide behind when interacting with another person.
3. This channel helps me feel insulated from others' reactions.
4. This channel helps me to disclose embarrassing things to others.
5. This channel makes me feel more at ease when I have to reveal something difficult to someone.
6. This channel offers me protection to say what I want to say.

**Strategic self-presentation through communication channel choice:**

**The receiver perspective and the effect of hierarchical status on sender's choice**

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**Abstract**

The impression management model of strategic channel use (O'Sullivan, 2000) suggests that people deliberately choose communication channels for self-presentational purposes. Based on a communication channel's characteristics (e.g., verbal vs. written, synchronous vs. asynchronous), people consider how it feels to convey a message through this particular channel, including the communication partner's (assumed) reactions. One aspect in this regard is the degree of subjective buffer between communication partners. For example, a text message usually provides more buffer than a video call. Our research explores the assumption that people prefer channels with different buffer effects depending on how the situation affects their self-presentation. Two separate studies examine previously uncovered aspects in context of the impression management model: the channel preferences of message recipients in self-presentationally relevant situations (study 1) and how senders' choices differ in those situations depending on their hierarchical status (study 2). In line with the assumed self-presentational advantage of higher buffer effects, study 1 shows that receivers prefer channels with a higher buffer effect when the communication subject is negative (vs. positive) and when the issue pertains to themselves (vs. the other). Results of study 2 indicate that senders prefer channels with a higher buffer effect when communicating negative (vs. positive) messages to a receiver of higher or equal status, while no difference is found with lower status communication partners. Theoretical implications for the impression management model and research on communication channel choice are discussed.

*Keywords:* communication channel choice, self-presentation, impression management, receiver perspective, hierarchical status

**Strategic self-presentation through communication channel choice:**

**The receiver perspective and the effect of hierarchical status on sender's choice**

The impression management model (IMM) of strategic channel use outlines a schematic process and makes several propositions about how people choose between different communication channels in situations that are relevant to their and other's self-presentation (O'Sullivan, 2000). It builds on the assumption that computer-mediated communication (CMC), i.e., all communication that employs some kind of technology, is inherently different to face-to-face conversations. In contrast to face-to-face conversation, where verbal and (partly involuntary) non-verbal information is exchanged in real-time, the transmission of information is shaped in CMC by the respective channel's unique characteristics. For example, when people communicate via text-message, their communication partner may feel less salient to them, which reduces psychological discomfort in unpleasant situations (Sussman & Sproull, 1999). Also, text messages can be composed with time and involuntary cues are masked, which allows for a strategic self-presentation and favorable display towards others (Walther, 2007).

The IMM proposes that people choose channels strategically in self-presentationally relevant episodes, utilizing the unique affordances a channel provides. Accordingly, people should show varying preferences for different communication channels depending on the situation and their self-presentational goals. However, the model focuses on the sender's perspective and remains vague about receivers' preferences in those situations, as well as whether they align with or oppose senders' preferred choices. Moreover, the model focuses on interpersonal relationships characterized by a certain degree of intimacy and closeness, which leaves some ambiguity regarding hierarchical status relations. The present report summarizes the results of two studies each dedicated to one of those unanswered questions and thereby adds to a further theoretical development and empirical validation of the IMM.

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As exemplified above, communication channels may reduce personal discomfort and facilitate the display of a favorable public image. Both of these intentions, private discomfort and public display, are also the most frequent explanations brought forward for the occurrence of the MUM effect (keeping Mum about Undesirable Messages; (Bond & Anderson, 1987; Dibble, 2018; Dibble & Levine, 2013; Tesser & Rosen, 1975). The MUM effect "describes the reluctance and/or hesitation messengers experience when faced with having to share bad news with a recipient" (p. 112, (Dibble, 2018). Apparently, communication channels can generally serve the intentions underlying this phenomenon: they may affect the intensity of the emotional experience or allow a more or less considerate construction of messages (Tretter & Diefenbach, 2020). One term occasionally found in literature that subsumes those capacities is the subjective "buffer" that communication channels establish (e.g., (Derks & Bakker, 2010; Sussman & Sproull, 1999; Wotipka, 2016). This report focuses on this "buffer effect" as a channel's subjective capacity to provide a psychological shield that mitigates emotional exposure and facilitates deliberate disclosure.

The buffer effect is a channel characteristic that O'Sullivan (2000) also theorized to be responsible for people's stronger preference for CMC in negative compared to positive situations. Basically, his impression management model assumes that, if people perceive a communication episode as self-presentationally relevant, they formulate a communication goal under the premise to minimize costs and maximize rewards, and pursue a corresponding interactional strategy. One aspect of this strategy, apart from adapting the message content, is the choice of an interaction channel that may alter the communication process in a desired way. Here, we presume that the buffer effect an individual associates with each distinct channel is decisive in those situations, and that people value this buffer as a means to cope with negative communication situations (e.g., by reducing the experience of the receiver's emotional reaction when delivering bad news).

Although the IMM also peripherally incorporates a communication partner's perception and self-concept into the theoretical process, it has not been investigated, up-to-this-point, if the previously shown channel preferences of sender's are actually in line with what receivers would prefer. Knowledge on whether and when discrepancies between both sides arise may provide insights on when potential sources of conflict may already lie within someone choosing "the wrong way to deliver the message". We examine this in the same way O'Sullivan (2000) explored sender preferences, but compare buffer effects of the chosen channels instead of general preferences for CMC  over face-to-face conversations. Specifically, we suppose that receiver's report the same preferences that senders express based on the valence of the message. That is, receivers would like senders to choose channels with a higher buffer effect for negative compared to positive messages, because it reduces discomfort and allows for a considerate choice of words.

**H1**: Receivers prefer communication channels with a higher subjective buffer for negative (vs. positive) messages.

On the other hand, senders have been shown to prefer CMC in episodes that predominantly focus on themselves rather than the receiver (i.e., sender as locus of the issue), in positive as well as negative situations (O'Sullivan, 2000). This may be interpreted as a self-serving behavior in channel choice. We assume that receivers are mainly driven by the same concerns for themselves. Thus, receivers would like senders to choose channels with a higher buffer effect in situations where they themselves and not the sender are the locus of the issue. In contrast to the first hypothesis on valence of the episode, this would constitute a discrepancy in channel preferences between sender and receiver based on the locus of the issue.

**H2**: Receivers prefer communication channels with a higher subjective buffer for messages that focus on themselves (vs. the sender).

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Although the IMM considers relationship evaluations an outcome of accumulated communication episodes and proposes them to influence the self-concepts of those involved, evidence on how the relationship might influence senders' preferred channel choices in those concrete episodes is scarce (Dibble, 2018; Johnsen et al., 2014; Ledbetter & Herbert, 2020). Moreover, those studies focused on a conceptualization of relationship that can be figuratively described on a horizontal axis, i.e., as different degrees of intimacy or interpersonal closeness. However, there is also a dimension to relationships that may, in turn, be considered as vertical, i.e., capturing status, hierarchical role or social power (Hall et al., 2015). According to politeness theory (Brown & Levinson, 1987), such asymmetrical power relations can result in different communication behaviors in face-threatening situations (e.g., more face-redressive strategies from lower ranking subjects). Accordingly, because of their self-presentational advantage, we assume that people choose channels with higher buffer effects to deliver negative (vs. positive) messages about themselves to higher status individuals. For receivers of equal status, we expect a similar, but maybe lower, effect since this relationship resembles the situation already examined by previous works. On the other hand, we assume this effect to vanish in cases of lower status individuals, since the incentive of beneficial self-presentation fades. Taken together, we basically hypothesize a moderating influence of status for the effect of valence on channel choice. Since different levels of status are most notably represented in vocational contexts, we formulate our hypotheses according to hierarchical work relations.

**H3**: There is an interaction effect between valence of the situation and relative hierarchical status of the receiver on channel choice.

**H3a**: With a recipient of higher status (i.e., superior), senders choose communication channels with a higher subjective buffer effect for negative (vs. positive) messages.

**H3b**: With a recipient of equal status (i.e., colleague), senders choose communication channels with a higher subjective buffer effect for negative (vs. positive) messages.

**H3c**: With a recipient of lower status (i.e., subordinate), senders choose communication channels with a similar subjective buffer effect for negative as well as positive messages.

In the remainder of this paper, we report two studies each testing a distinct set of the proposed hypotheses before a summarized discussion follows. The first study examines channel preferences in from a receiver's perspective (H1 and H2), while the second study takes a look at potential effects of status relations on senders' communication channel choices (H3a-c).

<div align="center">

**Study 1: Receiver Perspective**

</div>

**Method**

*Participants*

Participants were recruited via institutional mailing lists and through Clickworker, a German-based crowd-working platform. The sample comprised 139 participants (53% male, 46% female, 1% other) aged between 18 and 66 years (*M*=34.04; *SD*=12.81; *Med*=30). They were offered to take part in a raffle of amazon vouchers worth a total of 100€ as compensation.

*Procedure*

The study adapted the experimental design by O'Sullivan (2000) who presented participants four distinct vignettes characterized by a certain valence of the episode (positive or negative) and locus of the issue (sender or receiver). The resulting vignettes can be classified as "boost" (i.e., sender delivering a positive message about him- or herself), "praise" (i.e., sender delivering a positive message about the receiver), "confess" (i.e., sender delivering a negative message about him- or herself) or "accuse" (i.e., sender delivering a negative message about the receiver).

For example, the accuse condition read: "Imagine a situation in which another person is about to communicate with you about something that puts you in a bad light. It should be a topic, issue, or incident that would undermine how the person thinks about you. For example, it could be a discussion about you failing to meet his or her expectations, you doing something morally distasteful, you holding

an opinion you know the person would find repugnant, you being disloyal toward this person, etc.".

After reading the vignette, participants indicated the preferred communication channel from a list of different channels, as further described below. Following a 2x2-within-subjects-design, participants were presented with each of the four vignettes in a randomized order and indicated which communication channel they would prefer the most as a receiver in the described situation. After completing all four vignettes, they subsequently rated the subjective buffer effect of the previously chosen channels and finally provided demographic data (i.e., age and gender).

*Measures*

**Channel choice**

Participants indicated their most preferred communication channel out of seven available channels, covering the most popular communication media as well as face-to-face conversation. Specifically, the available options were "email", "text message", "instant messaging / chat (e.g., Whatsapp, Threema, Facebook Messenger)", "voice message / voice mail (e.g., voice messaging services, mobile phones' mailbox, answering machine)", "telephone", "video chat (e.g., Skype, Facetime)" or "face-to-face conversation".

**Subjective buffer effect**

Six items were used to measure the perceived buffer effect an individual associated with each previously chosen channel (see Appendix). Reliability analyses of the buffer effect scores yielded acceptable to good internal consistencies (Cronbach's $\alpha$ = .77 - .88).

**Results**

In order to test hypotheses H1 and H2, we compared the buffer effect scores of the communication channels an individual preferred in each of the described situations. A two-way repeated measures ANOVA with valence and locus as independent variables yielded results in accordance with H1. Receivers preferred channels with a higher buffer effect when they were about to

be contacted about a negative (vs. positive) issue ($F$(1, 136) = 6.35, $p$ = .013, partial $\eta^2$ = 0.05). In line

with H2, there was also a main effect of locus ($F$(1, 136) = 4.39, $p$ = .038, partial $\eta^2$ = 0.03), indicating that

receivers preferred channels with a higher buffer effect when the issue focused on themselves (receiver-

locus) rather than the other (sender-locus). There was no interaction effect between valence and locus

($F$(1, 136) = 1.43, $p$ = .223, partial $\eta^2$ = 0.01). Descriptive statistics of the average buffer effect scores in

each of the four conditions are shown in Table 1.


*Insert Table 1 here*


**Study 2: Hierarchical Status**

**Method**

*Participants*

68 participants (35% male, 63% female, 2% other) at the age of 17 to 63 (*M*=25.19; *SD*=9.48;

*Med*=21) were recruited via institutional mailing lists and social media announcements. As an incentive

they were offered course credit or the opportunity to take part in a raffle of amazon vouchers worth 50€

in total.

*Procedure*

The study design closely followed the procedure described in the first study but with three

substantial differences. First, participants took the perspective of senders, which means they were

responsible for the choice of communication channels instead of indicating a preference. Second,

vignettes were only varied across valence, i.e., positive ("boost") or negative ("confess"), with locus of

the issue held constant (i.e., sender-locus). Third, hierarchical status between sender and receiver was

manipulated which led to three kinds of relationships within a working context. More specifically, the

recipient of the message was either an individual of higher (i.e., superior), equal (i.e., colleague) or lower status (i.e., subordinate).

For example, in the positive, higher status condition, people were asked to imagine a confession to their boss, reading: "Imagine a situation in which you are about to communicate something to your superior. It should be a topic, issue, or incident that would put you in a good light. For example, it could be about you having achieved an extraordinary performance, you having something great to report, you having solved a particular problem, etc.".

Taken together, this resulted in a 2x3-within-subjects design, where participants were presented with six vignettes in a randomized order, indicated the communication channel they would choose, and, again, rated their chosen channels' subjective buffer effects afterwards.

*Measures*

Participants were offered the same selection of available communication channels listed above and rated their subjective buffer effect by using an extended set of items (see Appendix). Internal consistencies were acceptable to good and nearly identical to the first study (Cronbach's $\alpha$ = .78 - .88), except for "email" ($\alpha$ = .638). Since single item exclusion would have led to no significant improvement, the original scale was maintained for the sake of consistency among channels.

**Results**

The analysis of results followed the same rationale in comparing the subjective buffer effects people assigned to the communication channels they have chosen in the respective situations. A two-way repeated measures ANOVA with valence and status as independent variables yielded an interaction effect in accordance with H3 ($F(1.75, 115.25)$ = 3.42, p = .042, partial $\eta^2$ = 0.05). There was a significant main effect for valence of the message ($F(1, 66)$ = 6.46, $p$ = .013, partial $\eta^2$ = 0.09) but not for status ($F(1.50, 98.94)$ = 0.08, $p$ = .876, partial $\eta^2$ < 0.01). Also, in line with our hypotheses, a post-hoc analysis showed that people choose communication channels with a higher subjective buffer effect for delivering

negative (vs. positive) messages to higher status (H3a; $t(66)$ = 2.86, $p$ = .006, $d$ = 0.33) and equal status individuals (H3b; $t(67)$ = 2.65, $p$ = .010, $d$ = 0.26).  No significant difference in buffer scores was found between positive and negative messages for lower status recipients (H3c; $t(67)$ = 0.28, $p$ = .778, $d$ = 0.03). Descriptive statistics for buffer effect scores in each condition are depicted in Table 2.

*Insert Table 2 here*

**Discussion**

The present studies advance research on communication channel choice in context of the impression management model in two respects that have not been considered in previous research, namely, the receiver perspective and the influence of hierarchical status. In sum, the results of our first study support receivers' assumed preference for channels that buffer the communication in negative compared to positive situations – a tendency also present in studies on senders' channel choices (O'Sullivan, 2000; Wotipka, 2016). Furthermore, receivers, just as senders, report such a preference in communication episodes that focus on themselves. This hints toward a discrepancy of channel choice preferences depending on whose perspective is taken.

Senders' preference for channels with a higher buffer effect for issues that concern themselves may be seen as an egocentric, self-serving tendency but would not come with apparent disadvantages if receivers agreed with their choices. Previous research discussed that senders may choose "buffering" channels out of an underlying concern for the receiver, and that contextual factors like relationship closeness would contribute to that (Dibble & Levine, 2013; Ledbetter & Herbert, 2020). But in the situations covered here, there is obviously a stronger concern for the own self-presentation on both sides. Since senders' channel choices send a message in itself (McLuhan, 2010), potential disagreements

of receivers with those choices may constitute a potential source of conflicts even beyond the issue itself.

It has to be noted that our data is not suited to draw certain conclusions about such an existent disagreement about channel choices, since we did not collect sender's choices and focused on the buffer effects assigned by receivers. Situations can be imagined, in which the same channel choice would fit sender's and receiver's buffer preferences. For example, instant messaging might be an appropriate choice for both sides when the sender is confessing something, if it provides the sender with a high and the receiver with a low subjective buffer effect. However, since subjective buffer effects are not completely detached from more objective characteristics like synchronicity (Wotipka, 2016), this should not be the norm.

Our second study supported people's previously observed tendency to choose channels with higher buffer effects in negative (vs. positive) situations, but only as long as they confess to receivers of the same or higher status. No significant difference occurred for recipients of lower status. Apart from the extended evidence this exploration of hierarchical status provides to the relationship component of the IMM, it also contributes to the model's theoretical validation. At the initial stage of the process, the IMM proposes the premise of perceiving an episode as actually relevant for someone's self-presentation. Apparently, this is substantially more likely when people are not hierarchically superior to their communication partner. If they are, self-presentational concerns seem to vanish.

Former research in combination with our first study shows that sender as well as receivers generally prefer communication channels with a higher buffer effect for negative content. Apparently, this tendency is not reflected in sender's choices when they are to communicate with a subordinate. Presumably, communication goals other than self-presentation are salient in such situations. Maybe people do not care that much about a positive display towards lower status individuals and decide based on another premise, like being genuine with their subordinate co-workers. Accordingly, this calls for a

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more sophisticated approach to channel choices in socio-emotional situations that exceeds barely self-presentational goals.

While the present studies feature some limitations, like their hypothetical nature and partly idiosyncratic sample composition, their contribution to the field is twofold. On the one hand, it provides additional insights on the theoretical strengths and gaps of the impression management model. On the other hand, it may inform future research on the choice of communication channels, not only for self-presentational, but also other-oriented communication goals.

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**Tables**

**Table 1**

*Means (Standard Deviations) of Buffer Effect Scores in each Condition (Study 1)*

| | Locus | | | | |
| --- | --- | --- | --- | --- | --- |
| | Sender | | | Receiver | |
| Valence | *n* | *M (SD)* | | *n* | *M (SD)* |
| Positive | 137 | 2.52 (0.89) | | 137 | 2.57 (0.92) |
| Negative | 137 | 2.65 (0.88) | | 137 | 2.79 (0.93) |

**Table 2**

*Means (Standard Deviations) of Buffer Effect Scores in each Condition (Study 2)*

| | Valence | | | | |
| --- | --- | --- | --- | --- | --- |
| | Negative | | | Positive | |
| Receiver Status | *n* | *M (SD)* | | *n* | *M (SD)* |
| Higher Status | 67 | 2.77 (0.57) | | 67 | 2.60 (0.50) |
| Equal Status | 68 | 2.73 (0.52) | | 68 | 2.60 (0.49) |
| Lower Status | 68 | 2.68 (0.48) | | 68 | 2.67 (0.51) |

**Appendix**

*Study 1: Buffer Effect Items (adapted from Wotipka, (2016))*

1. This channel makes me feel like I am protected from the reactions of the other person.
2. This channel provides a "shield" for me to hide behind when interacting with another person.
3. This channel helps me feel insulated from others' reactions.
4. This channel helps me to disclose embarrassing things to others.
5. This channel makes me feel more at ease when I have to reveal something difficult to someone.
6. This channel offers me protection to say what I want to say.

*Study 2: Buffer Effect Items (newly created and adapted from Wotipka, (2016)*

1. This channel makes me feel like I am protected from the reactions of the other person.
2. This channel provides a "shield" for me to hide behind when interacting with another person.
3. This channel helps me feel insulated from others' reactions.
4. This channel helps me to disclose embarrassing things to others.
5. This channel makes me feel more at ease when I have to reveal something difficult to someone.
6. This channel helps me feel protected from others' responses.
7. This channel contributes to me feeling unaffected by emotional feedback.
8. This channel makes me feel like another person's reaction will have little influence on my mood.
9. This channel insulates me from the effects of communication on the other person.
10. This channel helps me to convey my emotional state to another person.
11. This channel makes me feel like I am able to illustrate emotional topics as intended.
12. This channel makes it easy for me to bring up emotional issues.
13. This channel helps me to address emotional subjects with another person.
14. This channel helps me to express my current mood.

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*Article*

# The Influence of Regulatory Focus on Media Choice in Interpersonal Conflicts

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**Abstract:** People's choices of (electronic) communication channels are central to the quality of communication—and sometimes detrimental to their actual communication goals. However, while factors influencing media choice are abundant, potential means to intentionally influence these choices are scarce within computer-mediated communication research. We explore the role of regulatory focus as one possible factor to understand and influence media choice in interpersonal conflicts. Regulatory focus theory proposes two motivational systems, promotion (i.e., needs for nurturance and growth) and prevention (i.e., needs for safety and security), that account for differences in preferred strategies for goal-pursuit. In a vignette-based study, we manipulated the situational regulatory focus (promotion or prevention) and surveyed participants' preferred media choice for a hypothetical conflict scenario. Our results show that the induction of a dominant prevention focus (vs. promotion focus) leads to a shift in preference towards leaner communication media and channels that establish a higher subjective buffer between sender and receiver (e.g., text-messaging over calling). We elaborate on how these findings contribute to the understanding of media choice in interpersonal conflicts and point out potential ways to influence behavior through the design of communication technologies. Limitations of the present study and future research opportunities are discussed.

**Keywords:** media choice; regulatory focus theory; buffer effect; interpersonal conflicts; computer-mediated communication

## 1. Introduction

More than ever, communication nowadays takes place via a plethora of devices and services. Organizations allow and encourage their employees more and more to work from home, and a majority of private communication already happens within digital contexts. Especially in the light of a world that has been hit by the covid-19 pandemic, resulting in lockdowns and social distancing, face-to-face conversations have been increasingly replaced by computer-mediated communication (CMC). This puts even more emphasis on the appropriate choices of communication media for such purposes that previously might have been addressed in person, since communication itself and its outcomes can be significantly affected by the channel it funnels through [1]. For example, without the additional information that can be derived from vocal intonation, a simple text message like "Can you call me asap?" might be a cause of worry or excitement [2].

While CMC research has extensively studied what media people should choose when, as well as what media they do choose and why, theoretically recommended and actual choices do not always coincide. In order to bridge this gap, it would be relevant to identify potential adjusting factors to influence media choices without changing the cornerstones of a given situation. Such knowledge could pave the way towards means to deliberately elicit beneficial media choices as suggested by pertinent theories and empirical research. For example, given managers' anecdotes about how (especially younger) employees'

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aversion to calling others can pose a threat to sales and recruitment [3], there should be a growing interest in how to increase people's willingness to pick up the phone when it is beneficial to the task at hand.

Although discrepancies between actual choices and theory-based recommendations occur regularly, this does not imply that people do not follow plausible motives underlying their decisions. In the face of interpersonal conflicts, for instance, it surely seems appealing to avoid direct confrontation through media choice, e.g., by leaving someone a text message about a critical issue rather than talking to them directly on the phone. After all, to shield oneself from the receiver and thereby "buffer" negative experiences is one common reason to use technology instead of communicating face-to-face [4–6]. But as attractive as this way of conduct might seem at times, the appeal of lean media bears the risk of being detrimental to the communication itself. For example, people are overconfident about their ability to interpret emotions in emails [7] and might misinterpret their content more negatively than intended by the sender [8]. Those pitfalls would in turn render the use of rich media more beneficial to the accurate exchange of emotions and successful conflict resolution.

Since interpersonal conflicts constitute situations of opposing motives, i.e., avoiding short-term negative experiences through lean media vs. approaching long-term solutions through rich media, they provide an appropriate application field to explore ways to guide people's media choice behavior. To this end, we build on the well-established psychological concept of regulatory focus and draw a line between the motivational orientation in critical communication situations and how it affects media choice. By consciously inducing a situationally dominant regulatory focus, we intend to influence people's media preferences when confronted with an interpersonal conflict situation. Given the propositions of earlier research about the effectiveness of different media for certain communication goals, this approach could furthermore pave the way towards more elaborate means to support beneficial media choices.

## 2. Theoretical Background

### 2.1. Media Choice

#### 2.1.1. Uses, Gratifications and Motives

How people choose between channels for communication has been a long-standing question in CMC research [9–11]. Early theories of CMC, first and foremost media richness theory [12], were dedicated to explaining effectiveness, i.e., what media characteristics allow for best performances under which circumstances. Soon, they were also applied to predict which media people actually choose. However, this approach often yielded contradicting evidence [10,13,14], since people tend to not act strictly rational but also according to their subjective needs. The so-called uses and gratifications approach (U&G), originally developed with mass media in mind, addresses this by focusing on the individual needs that are sought to be gratified by engaging with a certain medium [15–17]. Accordingly, predictions of media choice become more reliable when we understand why people use certain channels and how they decide between the options available to them. On the other hand, this enables us to create communication media that address the central motivational orientations people adhere to.

#### 2.1.2. Media as Means to an End

In general, each communicative act serves instrumental, self-presentational, and relational goals [18] to varying degrees and people use media in order to pursue these goals. In many everyday instances, people choose their communication channels quite pragmatically (e.g., what is accessible, easy to use or suits individual preferences). But beyond that, especially in cases of sensitive communication subjects, other needs can come to the fore and the media choice may vary accordingly [19,20]. Simply speaking, people may anticipate how they will feel if they communicate the same message via different media, and will choose the medium that promises the best feelings for themselves—thereby following the basic hedonic principle to approach pleasure and avoid pain [21]. In other words,

they strive towards desired end-states and move away from undesired end-states [22]. As such, media choice can serve as a means to take control over the communication process and the personal emotional outcomes.

In general, the hedonic principle as a driver of media choice becomes especially relevant in high-stakes situations with an inherent possibility of negative emotional consequences [23], as typically associated with the conveyance of negative messages. For positive messages, media choice is less of an issue since the message is less ambiguous and easier to interpret, while negative messages can be stressful for the sender as well as the receiver [4]. People anticipate the undesirable effect that a negative message might have for them or their relationship and adapt their transmission accordingly [24]. That is why it may be tempting to convey such messages via technological means since their mediating nature helps to insulate the sender from the probably unpleasant feedback of the receiver [5]. This capability of communication media to shield oneself from others' reactions when communicating critical content has sometimes been referred to as the "buffer effect" of media and has been reported by several authors [5,6,25,26].

Note, however, that choosing communication media to avoid direct confrontation is not the only way to deal with the communication of critical content. Instead of employing a buffer effect, one might utilize media choice to take control over a potentially threatening conversation in other ways. For example, people differ in their perceived ability to use a channel to express themselves as intended [27] and might be more confident to soften the impact of a message on the receiver face-to-face [6]. They may even prefer talking to someone face-to-face over calling them since it provides a more accurate assessment of how it affects the other [24].

Taken together, previous research shows that the communication channel an individual prefers is highly context- and subject-dependent [28], and media choice is a means to take control over the communication process in the desired way. Specifically, one can vary the emotional intensity and interactional speed in socio-emotional contexts via the chosen communication channel [29]. For instance, email as an a-synchronous and text-based communication medium promotes slower exchange of messages and lesser emotional cues than the telephone. Thus, the former provides more room for reflection and controlled answers than the latter.

In the face of interpersonal conflicts, this opportunity to control the upcoming communication process is likely to have substantial consequences for its outcomes. One's motive underlying media choice might either be to avoid the conflict and prevent escalation or to approach the conflict and strive for a resolution. That is why it is relevant to understand the psychological processes that regulate behavior in such critical situations and how they could be consciously influenced. The theory of regulatory focus provides a promising concept in this endeavor.

*2.2. Regulatory Focus Theory*

2.2.1. Outcomes and Strategies

Regulatory focus theory posits that humans possess two motivational systems that are rooted in fundamental needs and regulate their behavior: promotion and prevention [21]. The promotion system is based on needs for nurturance and growth, while the prevention system is based on needs for safety and security [30]. Consequently, people with a promotion focus are more sensitive to the presence and absence of positive outcomes, i.e., gains and non-gains, while people with a prevention focus are mainly concerned with the presence and absence of negative outcomes, i.e., losses and non-losses [31]. This also affects how people experience the status-quo. When there is no change of situation from one time to another, prevention-focused individuals would consider this as a success, since the situation did not become worse (a non-loss). Conversely, promotion-focused individuals would see this as a missed chance to improve the situation (a non-gain), therefore considering it a failure [32]. Notably, these systems are independent, i.e., a person can be

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high or low on both at the same time, and while one might have a predominant disposition, regulatory focus is also affected by one's current situation [33].

But people do not only differ in their conceptualization of desired and undesired end-states, but also with regard to the preferred strategic means they employ to pursue their goals [22]. Promotion focus regulation involves a preference for eager, advancement strategies and promotes approach behaviors, while prevention focus regulation, in contrast, leads to a preference for vigilant, cautious strategies that elicit avoidance behaviors [21]. Therefore, "a person who wants to get a good grade on a quiz (a desired end-state), for example, could either study hard at the library the day before the quiz (approaching a match to the desired end-state) or turn down an invitation to go out drinking with friends the night before the quiz (avoiding a mis-match to the desired end-state)" [34] (p. 117). In sum, there can be different paths to the same goal, but preference towards a particular path is determined by individuals' regulatory focus.

### 2.2.2. Regulatory Focus in Conflicts

As outlined above, media choice gains importance in negatively-valenced situations, particularly when the issue is not just a threat to each parties' subjective well-being but their relationship [4]. This becomes especially important when the source of negativity not only pertains to the actual act of sharing negative information but resides in a potential disagreement between both parties. Interpersonal conflicts are usually grounded in some kind of incompatibility and are one of the most common stressors in daily life. But they are not exclusively negative since conflicts can also contribute to a deeper understanding of oneself and the affected relationship [35]. Thus, interpersonal conflicts are particularly suited to investigate regulatory focus' role in media choice because they bear the burden of emotional intensity and uncertain outcomes. However, which channel senders choose to handle them may well be affected by their currently dominant motivation to pursue a vigilant, avoiding or eager, approaching strategy.

An investigation of how people deal with critical and potentially conflict-evoking situations can profit from regulatory focus theory in two ways: By considering how people tend to conceptualize its possible outcomes on the one hand and, on the other hand, what strategic means they prefer. First, considering the uncertain result of a conflict, the subjective probability of a positive or negative outcome can be affected by regulatory focus. In anticipation of future events, people with a prevention focus tend to prefer pessimistic forecasts, whereas those with a promotion focus show a preference towards optimistic forecasts [36]. Furthermore, research has shown that promotion-focused individuals perceive demanding tasks, in our case interpersonal conflicts, more as a challenge than a threat compared to their prevention-focused counterparts [37].

Second, aside from the different expectations of outcomes, potential conflicts also provide the opportunity to be handled in different ways. For example, people primed with a promotion focus display more risk-seeking behaviors, while an induced prevention focus leads to risk avoidance [38]. In price negotiations, usually a communication situation with conflicting goals, prevention-focused individuals prefer vigilant, loss-minimizing strategies, whereas promotion-focused individuals prefer eager, gain-maximizing strategies [39]. Also, Rodrigues et al. [40] report that in relationships, partners with a prevention focus tend towards conflict avoidance, while a promotion focus is associated with more conflict solution strategies.

Taken together, people vary in their perception of outcomes and their preference for certain strategies depending on their currently dominant regulatory focus. Accordingly, we suppose that different media choices also appear more or less suited to handle an interpersonal conflict due to their differences in richness and buffer effect. In a promotion focus, people may see the opportunity for conflict solution through direct confrontation and thus prefer richer media, while in a prevention focus, people may tend towards conflict-avoidance and prefer leaner media with a higher buffering effect. Therefore, the active

manipulation of individuals' focus may influence people's attitude towards available options and consequently their media choice.

*2.3. The Present Study*

In line with previous research outlined above, we assume that people anticipate the course of an upcoming conflict and its consequences and take this into consideration when choosing among media. While some people might have more confidence in face-to-face conversations or technological means that closely resemble it, there is evidence for an increasing preference towards CMC in cases of negative messages [5,24,25]. This can be attributed to the subjective buffer effect of media which constitutes a metaphorical shield that provides a feeling of control over the interaction and safety from aversive reactions. While communication media differ in their objective characteristics and therefore their subjective buffer effects, we suppose that people's preference towards higher buffering media vary depending on their currently dominant regulatory focus. More precisely, prevention focus is related to pessimistic anticipation, loss-minimizing behavior as well as risk and conflict avoidance. Thus, we presume that in the face of interpersonal conflicts, prevention-focused individuals tend to choose media with a higher buffering effect than promotion-focused individuals.

**Hypothesis 1 (H1).** *Prevention (vs. promotion) focus leads to the choice of channels with a higher subjective buffer for the communication about interpersonal conflicts.*

Although people differ in their perception of communication media [27,41,42] and a channel's buffering effect is one particular subjective media characteristic [5,26], this individual variance is limited. There are still objective characteristics that have led to a common understanding of a media richness continuum on which different channels can be arrayed along [43,44]. According to the widely used media richness theory, channels vary in their richness due to differences regarding the speed of interaction, the multiplicity of cues, the language variety, and the personal focus a channel establishes [45]. For example, the telephone is considered richer than written text [46], and email leaner than voicemail [10]. In a broad sense, these characteristics are closely intertwined with the modality a channel uses, i.e., if it is text- or speech-based, therefore sending fewer cues, and interactional speed, i.e., if it is synchronous or asynchronous, therefore providing slower feedback [47]. Accordingly, we categorize media in the following order from leanest to richest: text-based and a-synchronous, text-based and synchronous, speech-based and a-synchronous, speech-based and synchronous. Note that this order based on the concept of richness is also in parallel to other conceptualizations of prominent media theories, like social presence [11,44] or media synchronicity [13,48]. Those theories would suggest an identical order, with text-based and a-synchronous channels at one end to speech-based and synchronous channels at the other end of the social presence and synchronicity continuum, respectively. In addition to H1, which relies on the subjective perception of a medium, namely its buffer effect, we assume that people will also show differences in their actual choice of media.

**Hypothesis 2 (H2).** *Prevention (vs. promotion) focus leads to a higher probability of choosing leaner channels for the communication about interpersonal conflicts.*

We conducted a vignette study to test our assumptions regarding the influence of regulatory focus on the choice of media for interpersonal conflicts. By priming different regulatory foci, our study, for one thing, aims to contribute to a better understanding of channel preferences in conflicts, but most notably explores a way to influence media choice in otherwise identical situations.

## 3. Materials and Methods

### 3.1. Design

In order to test the assumptions regarding the influence of regulatory focus on media choice for interpersonal conflicts, we conducted a vignette-based online study where participants were randomly assigned to one of two regulatory focus manipulations. They were either primed with a promotion or prevention focus and subsequently indicated their medium of choice for a potential conflict situation. Afterward, they also rated the chosen medium according to its subjective buffering effect. In addition, chronic regulatory focus and interpersonal closeness were assessed to control for potentially confounding variables.

### 3.2. Materials

#### 3.2.1. Chronic Regulatory Focus

The German Regulatory Focus Questionnaire (RFQ) [49] was applied to control for chronic differences in individuals' regulatory focus. The German RFQ assesses the general regulatory focus orientation with eleven items on a five-point scale ranging from "never or seldom"/"never true"/"certainly false" (1) to "very often"/"very often true"/"certainly true" (5). It consists of six items for promotion focus, e.g., "How often have you accomplished things that got you 'psyched' to work even harder?", and five items for prevention focus, e.g., "Not being careful enough has gotten me into trouble at times.", partly reverse-coded. Internal consistencies for the promotion and prevention focus scales of the German RFQ were acceptable with a Cronbach's $\alpha$ of 0.725 and 0.797, respectively (see Table 1 for additional descriptive statistics).

**Table 1.** Psychometric Properties of Inclusion of Other in the Self Scale (IOS), German Regulatory Focus Questionnaire (RFQ) and Buffer Scores.

| Scale | M | SD | Min | Max | Cronbach's $\alpha$ |
|---|---|---|---|---|---|
| Interpersonal Closeness (IOS) | 3.25 | 1.82 | 1.00 | 7.00 | n/a |
| Regulatory Focus (RFQ) | | | | | |
|   Promotion Score | 3.50 | 0.61 | 2.00 | 4.67 | 0.725 |
|   Prevention Score | 3.32 | 0.72 | 2.00 | 5.00 | 0.797 |
| Channel Buffer Score | | | | | |
|   text-based and a-synchronous (e.g., email, SMS) | 3.96 | 0.70 | 3.00 | 5.00 | 0.784 |
|   text-based and synchronous (e.g., chat, instant messenger) | 3.56 | 0.54 | 2.83 | 4.33 | 0.727 |
|   speech-based and a-synchronous (e.g., voice message, voicemail) | 3.11 | 0.99 | 2.00 | 4.83 | 0.648 |
|   speech-based and synchronous (e.g., telephone) | 2.41 | 0.75 | 1.00 | 4.00 | 0.775 |

#### 3.2.2. Regulatory Focus Induction

To manipulate regulatory focus, we adapted a well-established approach [50] where people are asked to think and write about either their ideals and hopes, i.e., inducing promotion focus, or duties and obligations, i.e., inducing prevention focus (note: to enhance the effect, we also asked participants to list strategies to fulfill these goals, a common method to induce regulatory fit, but implemented no non-fit condition; see limitations section for further discussion). Within the promotion condition people encountered the following task description:

> "Think about an aspiration, a hope, or an ideal that you currently hold and want to accomplish. It should be something at which you want to have success. Afterward, list three things you can do to most possibly succeed in that."

On the other hand, within the prevention condition, participants were presented with the following instruction:

> "Think about a duty, responsibility, or obligation that you currently hold and have to fulfill. It should be something at which you should not make mistakes. Afterward, list three things you can do to most possibly not fail in that."

In both conditions, participants described the goals they thought about and listed three ways to pursue them.

### 3.2.3. Vignette

Participants were asked to put themselves in a scenario revolving around a potential conflict and briefly describe their imagined situation. The vignette closely followed the structure from O' Sullivan [5] and read:

> "Imagine a situation, in which you are about to communicate with another person. This should be about an issue that could lead to a conflict between you and this person. This potential conflict could result from
>
> - you having different opinions about a topic,
> - you doing something the other person considers unacceptable,
> - or you having critique, that might hurt the other person.
>
> Please shortly describe the concrete situation that you are imagining."

### 3.2.4. Media Choice

Participants were asked to "Imagine you are in the situation described before, which way of communication would you prefer?". They had four options of media to choose between, clustered among modality and synchronicity. The possible answers included "written and not synchronous (e.g., email, SMS)", "written and synchronous (e.g., chat, instant messenger)", "spoken and not synchronous (e.g., voice message, voicemail)", or "spoken and synchronous (e.g., telephone)".

### 3.2.5. Interpersonal Closeness

Since the relationship to the receiver has been shown to play a pivotal role in the use of media [19,25], the Inclusion of Other in the Self Scale (IOS) was used as a lean and reliable measure for interpersonal closeness [51,52]. By selecting the appropriate pair of increasingly overlapping circles, representing the persons involved, people indicate how close they feel to the respective other on a pictorial seven-point scale. Detailed statistics regarding the IOS are presented in Table 1.

### 3.2.6. Buffer Score

The subjective buffering effect of a medium, i.e., the capacity to establish a metaphorical shield between sender and receiver, was measured with six items adapted from Wotipka [26]. On a scale from "strongly disagree" (1) to "strongly agree" (5), people assessed the respective medium with items like "This channel makes me feel like I am protected from the reactions of the other person." or "This channel offers me protection to say what I want to say." Internal consistencies were acceptable for three of the four possible media choices: text-based and a-synchronous (Cronbach's $\alpha$ = 0.784), text-based and synchronous (Cronbach's $\alpha$ = 0.727), speech-based and synchronous (Cronbach's $\alpha$ = 0.775). The scale to assess the subjective buffering effect of speech-based, asynchronous media, however, yielded a questionable Cronbach's $\alpha$ of 0.648. Nevertheless, we refrained from deleting one item that would have led to an improvement to maintain consistency across media assessments (see Table 1 for detailed statistics).

### 3.2.7. Attention Check

In order to control for participants' attention and engagement in the study, we included a dummy question which participants were instructed to *not* answer. More specifically, participants have been presented the following instruction towards the end of the questionnaire: "We are interested in whether you have taken the time to thoroughly read the

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instructions and understand them correctly. To demonstrate that you have read and under-stood the instructions, please ignore the following question and click 'proceed'. Thank you." The subsequent (dummy) single-choice question asked for the individual's most preferred communication medium. Participants who answered this question probably did not read the instructions attentively and thus failed the attention check.

### 3.3. Procedure

After confirming an initial consent agreement, participants filled out the German RFQ and afterward were presented with either the promotion or prevention focus induction. They wrote down one of their current hopes/ideals or duties/obligations and three ways they intend to pursue them. This was disguised as a way to guarantee their engagement in the study. Subsequently, participants were asked to put themselves in the outlined potential conflict situation and shortly describe what situation they concretely imagined. Afterward, they indicated the communication channel they would choose and rated the relationship with the imagined receiver on the IOS. Following that, participants rated the respective media on the buffer scale, were asked to report their age as well as gender, and encountered the actual attention check described above. Finally, they were thanked and received instructions on how to acquire their compensation.

### 3.4. Sample

The study's final sample consisted of 80 participants (59% male, 40% female, 1% di-verse) with a mean age of M = 35.5 (SD = 11.5; Min = 18; Max = 70). Initially, 140 partici-pants were recruited via Clickworker, a German-based crowd-working platform similar to Amazon Mechanical Turk and received EUR 1.20 as compensation for their participation. The initial sample size was based on a priori power analysis with a pre-defined alpha level of 0.05 and a power of 0.80. Since regulatory focus induction is at the center of our study design, we retrieved the lowest reported effect size, i.e., Cohen's d = 0.56, from Freitas and Higgins [50] who applied a similar manipulation. This yielded a recommended sample size of 104 participants.

Participants had to be at an age of 18 to 99 years and speak German as a first language. Those who failed the simple attention check, i.e., who answered the dummy question (43% of the initial sample), were excluded from further analyses (see Section 3.2.7. Attention Check). This resulted in a remaining sample of 80 participants. Besides, we also performed a manipulation check regarding the regulatory focus inducing writing task, verifying that participants actually wrote about aspirations, hopes or ideals (in the promotion condition) or duties, responsibilities or obligations (in the prevention condition). The manipulation check was positive for all remaining participants, resulting in the final sample size of 80 (see Supplementary Materials for the open data set).

### 4. Results

As an initial analysis, we explored the relationship between different communication media and their assigned buffer scores, assuming that media with those characteristics that label a medium as rich should in turn lead to less buffering experiences. The decline in buffer score from text-based, a-synchronous to speech-based, synchronous channels depicted in Table 1 is supported by a significant statistical relationship between medium and buffer score according to Spearman's rank-order correlation ($r_s = -0.586$, $p < 0.001$). This supports the implicitly presumed interplay between the dependent variables underly-ing our hypotheses. While H1 explores the influence of regulatory focus on differences in subjective buffer scores of the chosen media, H2 considers the concrete media choice and their ranking along the richness continuum.

In line with H1, participants chose communication channels with higher subjective buffer scores for the interpersonal conflict if they previously encountered a prevention focus induction (N = 42, M = 2.95, SD = 1.00) compared to a promotion focus induction (N = 38, M = 2.54, SD = 0.80; $t(78) = 2.043$, $p = 0.044$, Cohen's d = 0.45). A subsequent

ANCOVA controlling for each participant's chronic promotion and prevention focus as well as the respective interpersonal closeness as covariates yielded analogous results ($F(1,75) = 4.083$, $p = 0.047$, partial $\eta^2 = 0.052$).

Furthermore, to test the assumption of H2 that people in a prevention focus tend to choose leaner media than people in a promotion focus, we applied an ordinal logistic regression with regulatory focus as the predictor and actual media choice as the criterion. Overall, the model showed a good fit to the data, since neither the Pearson goodness-of-fit test ($\chi^2(2) = 1.057$, $p = 0.529$) nor the deviance goodness-of-fit test ($\chi^2(2) = 1.097$, $p = 0.549$) yielded significant results. Furthermore, the model predicted media choice significantly better than the intercept-only model ($\chi^2(1) = 5.923$, $p = 0.015$). The odds of choosing a leaner medium rose by a factor of 3.487 if people were in a prevention compared to a promotion focus, which constitutes a statistically significant effect ($\chi^2(1) = 5.386$, $p = 0.020$). Thus, since the odds ratio is larger than one, the probability of choosing a leaner medium increases for prevention-focused individuals compared to promotion-focus individuals, which is in line with H2. This effect holds true when chronic regulatory focus scores and interpersonal closeness are incorporated into the regression (OR = 3.546; $\chi^2(1) = 5.432$, $p = 0.020$), while their integration even leads to a poorer model fit compared to the intercept-only model ($\chi^2(4) = 7.117$, $p = 0.130$). Detailed statistics for both logistic regression models are presented in Table 2.

**Table 2.** Logistic regression results for the prediction of media choice [1].

| Model | Variable | B [5] | SE [6] | Wald $\chi^2$ | p | OR [7] | 95%-CI OR | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Lower | Upper |
| **Model I** [2] | Regulatory Focus Manipulation [4] | 1.25 | 0.54 | 5.39 | 0.020 | 3.49 | 1.21 | 10.01 |
| **Model II** [3] | Regulatory Focus Manipulation [4] | 1.27 | 0.54 | 5.43 | 0.020 | 3.55 | 1.22 | 10.28 |
| | Chronic Promotion Focus Score | −0.34 | 0.42 | 0.67 | 0.412 | 0.71 | 0.31 | 1.61 |
| | Chronic Prevention Focus Score | 0.19 | 0.34 | 0.33 | 0.566 | 1.21 | 0.63 | 2.35 |
| | Interpersonal Closeness | 0.10 | 0.14 | 0.47 | 0.491 | 1.10 | 0.83 | 1.46 |

[1] Higher scores indicating leaner channels. [2] $R^2$ Nagelkerke = 0.085. [3] $R^2$ Nagelkerke = 0.102. [4] Regulatory Focus Coding: Promotion = 0, Prevention = 1. [5] Unstandardized Regression Coefficient. [6] Standard Error. [7] Odds Ratio.

## 5. Discussion

Plenty of works in the field of CMC research have shown that media choice is dependent on a variety of individual differences, e.g., personality [53], experience [54], or competence [55], as well as contextual factors, e.g., message valence [6], receiver [25], or culture [56]. However, within those studies, these factors are either pre-determined by the sender's traits or essential components of the situation are varied. We explored a way to influence people's media choices without changing anything about the situation itself, by conducting an a-priori manipulation and even controlling for sender-specific (chronic regulatory focus) and receiver-related (relationship) variables. We did this by adapting the propositions of regulatory focus theory to a new application field, namely media choice in interpersonal conflicts. We were able to show that prevention focus induction led to a preference for media with higher buffering effects and, more importantly, to an actual shift in probability of choosing leaner communication channels compared to a promotion focus induction.

Of course, this insight is yet limited to the particular case of interpersonal conflicts and even within those conflicts, it is not a given which communication medium constitutes the best choice. For example, media richness theory would propose different media depending on whether a conflict is based on an absence of information, i.e., uncertainty, or multiple interpretations of a situation, i.e., ambiguity [14]. Similarly, media synchronicity theory would characterize appropriate media choices based on the required processes, whether new information has to be transmitted and processed, i.e., conveyance, or a mutual understanding of known information is to be established, i.e., convergence [13,57].

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Nevertheless, while the identification of beneficial media choices has been and always will be a subject central to CMC research, we laid out a new approach to nudge people accordingly. It is up to future investigations, to what extent this approach can be applied to other communication situations and which other ways to influence people's media choice might also prove effective.

*5.1. Theoretical Implications*

Our work provides several theoretical contributions to research regarding media choice, regulatory focus, and interpersonal conflicts. First, our study outlines the potential influence of regulatory focus on media choice. Prominent theories in the field of CMC center on adequate choices of communication channels in terms of better performance. However, in order to predict actual media choices, it is more important to understand why people choose a certain channel, a notion central to the uses and gratifications approach. Regarding conflict situations, we referred to the buffer effect of media as a means to cope with the upcoming conversation. By choosing leaner media, people might seek to satisfy an active motive to prevent unpleasant experiences and avoid direct confrontation. On the other hand, people might see richer media as an opportunity to better tackle the roots of a conflict. Our results reveal that people show different preferences depending on the activated regulatory focus and support the assumption that accompanying approach and avoidance motives play a role in media choice. Thus, regulatory focus theory can contribute to the understanding of the underlying psychological processes of media choice that take place when distressing situations might harm individuals' well-being as well as their relationships.

Second, taking the conflict research outlined above into account, our results are in line with empirical evidence regarding the association between regulatory focus and behavioral tendencies. Furthermore, these associations might provide alternative or complementing explanations for our observations apart from the particular buffer of a medium. Using a channel's buffer effect to shield oneself from negative reactions of a receiver can be considered as a self-serving behavior, valuing own needs over those of others. Similarly, Winterheld and Simpson [58] reported that in romantic relationships people with a prevention focus perceive their partners as more distancing and less supportive than with a promotion focus. Moreover, prevention-focused individuals approached conflicts by discussing details of the conflict while promotion-focused individuals displayed more creative conflict solution strategies. These tendencies correspond to the choice of communication technology observed by us, since leaner media, i.e., text-based and/or a-synchronous, allow for a better elaboration of a conflict's details and their processing, while richer media, i.e., speech-based and synchronous, allow for a back-and-forth and emotional displays, that enable better discussions about the possible resolutions and ways out of a disagreement.

This link between a communicational strategy and certain media characteristics can also be found in the preference for accuracy over speed tactics depending on regulatory focus [33,59]. In a prevention focus, people express a stronger preference for accuracy, which might be addressed by choosing a-synchronous media. On the other hand, promotion-focused individuals prioritize speed, which is why they might prefer faster communication channels to immediately resolve conflicts. This link between regulatory focus and media choice could also be drawn on a more basic cognitive processing level, insofar as prevention focus is associated with local processing of information and promotion focus with global processing [60]. Local processing of a dispute might result in a stronger focus on the content and circumstances of a conflict, while global processing might be more strongly represented in the intent to maintain the relationship. Each way of processing would in turn suggest a different communication channel that fits the respective individual's priorities.

Last, our work contributes to the study of media choice by taking focus away from the prediction of media choice to its deliberate manipulation. To our knowledge, this approach is the first attempt to influence media choice by manipulating participants' situational

regulatory focus. While there might be associations with people's chronic regulatory focus and the preference for certain media [61], our approach enabled us to influence media choice without interfering with the cornerstones of a communicational act, that is sender, receiver, and message. We did not vary the incident, an interpersonal conflict, and controlled for individual differences as well as the sender–receiver relationship. Yet, we were able to elicit differences in people's preferences towards communication channels by conducting a preceding regulatory focus manipulation. If this intervention would be for better or worse in real-life scenarios, as mentioned above, might depend on the particular circumstances and is open to further inquiry, but it extends the possibilities of media choice research with an opportunity to do so.

*5.2. Practical Implications*

As much as the opportunity to influence media choice by varying regulatory focus contributes to research, it indicates potential ways to foster better communication in everyday life. Practical applications of regulatory focus theory can be found in a wide range of contexts such as work [62,63], health [64,65], or consumer behavior [66,67]. Similarly, even though the effects of a certain dominant focus and the corresponding media choice on communication itself were not covered by our study design, regulatory focus theory could potentially be utilized to support successful conflict communication and long-lasting relationships. The use of text-messaging instead of face-to-face communication, for example, has been associated with an increase in distancing behavior in couples' conflicts [68]. Moreover, people who highly value interpersonal relationships anticipate more negative consequences and show higher tendencies for conflict avoidance [69,70]. At the same time, avoidance-oriented individuals are prone to exhibit negative communication behaviors that might harm overall relationship satisfaction [71]. This indicates that choices of lean media, as well as avoidance-motivated behavior, can be detrimental to the resolution of conflicts and thereby might bring relationships in jeopardy. Our insights suggest that a deliberate promotion focus induction could counteract these behavioral tendencies by increasing individuals' preferences for richer media and at the same time promote a more beneficial conflict approach.

Of course, within real-life scenarios, an experimental manipulation of regulatory focus as applied within our study seems impractical. However, the present study could still support conflict management by applying our insights on the role of regulatory focus in media choice to the design of communication technologies. While we demonstrated that the manipulation of regulatory focus impacts media choice, media itself could, in turn, be designed in a way that it not only appeals to people with a particular regulatory focus but actually induces it. Taking this thought one step further, such a deliberate induction through design may also foster beneficial communication behaviors in all situations where research suggests a particularly preferable regulatory focus.

Given the notion that media itself could support interpersonal communication by affecting regulatory focus, the question that arises is how to organically implement such a manipulation within real-life situations. Unfortunately, feasible and realistic ways to manipulate regulatory focus are still to be found since research in the field mostly employs verbal priming methods, whereas non-verbal methods would provide a more applicable approach to the design of media. For example, a more subtle and implicit way to induce a certain regulatory focus than the approach we choose by asking participants to write about their goals and ways to achieve them was used by R. S. Friedman and Förster [72]. They applied a pictorial maze task that participants had to solve in advance. This task was either framed in promotion terms, i.e., a mouse trying to find to a piece of cheese, or prevention terms, i.e., a mouse seeking shelter from an owl. Approaches like these seem to provide a more economic and unobtrusive way to change regulatory focus than completing a writing task. However, this kind of non-verbal manipulation is still separated from the actual application and does not provide a solution to naturally integrate the

desired manipulation. In fact, the literature on non-verbal, integrated regulatory focus induction is still scarce.

The most promising way to achieve such an implicit manipulation would be to implement visual cues that are psychologically associated with either approach or avoidance motivation. For instance, Mehta and Zhu [73] reported several studies supporting the relationship of the color red with avoidance and blue with approach motivation and their influence on performance of different tasks. Similarly, Elliot et al. [74] also report evidence for a link between red and avoidance motivation. Furthermore, neuroimaging studies by Bar and Neta [75] show higher activation of the amygdala, which is associated with fear processing, when people were presented with sharp objects compared to their counterparts with a curved contour. Although pertinent research is still inconclusive [76], such insights on the association of visual characteristics with changes in cognitive processing might contribute to the design of user interfaces and its effect on users' strategic orientation. For example, avoiding red and sharply shaped design elements for communication media might obviate the activation of a prevention focus, while blue elements and roundly shaped edges might even foster a promotion focus. This could in turn affect the choice and usage of communication media for interpersonal conflicts. Nevertheless, this is highly speculative (and does not apply to voice-only channels, e.g., phones) and should be a subject—among others—of future research inquiries.

*5.3. Limitations and Future Research*

Especially since the present study applied a rather new approach by bringing regulatory focus theory and media choice together, some limitations have to be discussed. First, while our initial sample exceeded our intended sample size by far, this was no longer the case after we excluded participants due to failed attention checks. This led to a lower statistical power, and while we still found a significant effect on media choice, a larger sample size would indisputably yield more reliable estimates of effect sizes.

Second, there are restrictions inherent to the application of a hypothetical scenario to which participants responded to. Though vignette studies are a common and recognized method to investigate phenomena under controlled circumstances [77], the question about whether participants' answers correspond to their actual behavior in real life conditions definitely calls for further investigation. On the one hand, people can be subject to a social desirability bias [78], indicating media choices they think they ought to choose. For example, one might believe that rich channels are the only appropriate way to handle conflicts since they convey a symbolic message of goodwill to resolve the conflict [79]. On the other hand, people might be mistaken about their behavior given that they actually experience the described distressing episode, since self-assessments might be a good, but definitely not perfect predictor of actual behavior [80,81].

Third, there are limitations concerning the particular content of the presented vignette. We provided several examples of potential conflicts emerging from disagreements between sender and receiver to make sure participants can recall or imagine a relatable situation. More specifically, we asked participants to imagine conflicts that either routed in different opinions between those involved, social transgressions that the other might condemn or critique towards the receiver. Since these different examples left room for variation among individuals, upcoming research should adhere to more concretely and extensively formulated descriptions to guarantee a shared interpretation of scenarios between all participants. Such situations should involve the concrete cause of the interpersonal conflict as well as the particular relationship between the two parties, in order to examine potential effects of the inherent type of conflict while controlling for potentially confounding factors.

Fourth, future research may profit from the application of systematically varied vignettes, particularly with regard to differences in the emotional and instrumental spectrum. We referred to situations of interpersonal conflicts since their negative valence was expected to induce distress and in turn deliberate considerations about the pros- and cons of available communication channels. We did this because previous research suggests

that the most desirable characteristic for media choice is media accessibility and its ease of use [19], but more profound reasons are taken into account when the message holds a certain socio-emotional valence, i.e., it is positive or negative [5,6]. However, we initially focused on negative scenarios and did not incorporate positive emotions. And even within the negative spectrum, distinguishable emotions like anger and fear might induce different processing of conflict situations [82]. For example, since fear is associated with less control over an event than anger, one might be more receptible to the buffering effects of mediated channels. These variations of emotional aspects in combination with regulatory focus should be part of future media choice research. The same applies to a more multifaceted investigation of communication goals, since communication not only serves self-presentational and relational but also instrumental purposes [18]. For example, some conflicts might require the persuasion of another party or the negotiation of new terms. Such content-related goals, apart from the relational aspect of a conflict, can also play a role in media choice [83] and should be taken into account for further inquiry.

Last, there are two promising starting points for future research that are more focused on the application of regulatory focus theory. As already discussed above, one of them is the exploration of methods to implicitly induce an intended regulatory focus by designing elements and characteristics of communication media accordingly. The other pertains to the well-established phenomenon of regulatory fit. Plenty of research has shown wide-ranging effects of experiential value when one's current regulatory orientation and means of goal pursuit are in line, coming from the experience of "feeling right" [31,33,59]. For example, promotion-focused participants are willing to pay a higher price for an object they choose with an eager strategy, i.e., thinking about what they would gain if they chose it, instead of a vigilant strategy, i.e., what they would lose if they did not choose it. In turn, the opposite observation was made for prevention-focused participants [22]. Similarly, participants with a predominant promotion focus are more persuaded by messages framed in terms of eager means than vigilant means, while the reverse was true for participants with a predominant prevention focus [84]. Accordingly, given our reported association between regulatory focus and media choice, people might experience conflicts differently and value the outcomes more, depending on whether the used communication channel fits their current regulatory focus.

In this context, it should be noted that we applied a writing task typically used to manipulate regulatory focus by asking for obligations (i.e., prevention goals) or aspirations (i.e., promotion goals). But furthermore, we also asked to list strategies to not fail (i.e., vigilant strategies) in the prevention condition and to succeed (i.e., eager strategies) in the promotion condition. This listing of strategies is usually used to induce regulator fit or non-fit by asking for either compatible (promotion-eager and prevention-vigilant) or non-compatible (promotion-vigilant and prevention-eager) strategies to the previously stated goals [50]. In our study, we had no interest in inducing incompatible states and applied a manipulation in which regulatory fit would be assumed in both conditions, thereby balancing possible effects. However, a more precise regulatory focus manipulation by just asking for goals could have been conducted, which represents the final limitation of our study.

## 6. Conclusions

The question of why people choose communication media as well as how they handle interpersonal conflicts is an ongoing challenge of scientific inquiry. Communication media as means to outline and discuss these conflicts play a vital role in their outcome, since the channel itself inevitably affects communication processes. The present research contributes to these branches of research by applying regulatory focus theory in order to understand the psychological underpinnings of media choice and, furthermore, influence behavioral tendencies in such situations. We were able to show that the induction of a prevention focus, compared to a promotion focus, increases people's susceptibility to channels with a higher buffering effect and shifts their preferences towards leaner media. Among other

implications, regulatory focus manipulations might prove to be a way to deliberately influence media choice without changing the cornerstones of a given interpersonal conflict—an endeavor barely represented in current research. In conclusion, our study adds to current media choice and the regulatory focus literature by bringing a well-established motivational theory to an application field of everyday relevance.

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