Exploring teacher–student communication in senior-education contexts in Taiwan: A communication accommodation approach

By CHIN-HUI CHEN*

Abstract

This study investigated the language-accommodation strategies used by Taiwanese teachers when communicating with older adults in senioreducation contexts. First, the interview phase identified various communication strategies and their underlying rationales; second, the survey phase verified the degree to which the identified communication strategies were used, as well as their associations with teachers' age differences. The identified communication strategies were divided into four broad categories: secondary baby talk, mitigation of references to death or illness, politeness strategies and code selection (use of the dialect preferred by older students). The underlying considerations included older students' perceived age-related physical or cognitive decrements, their social backgrounds and socio-psychological needs, as well as the teachers' self-determined relational positioning or priority in the communication process. Young and middle-aged teachers were more likely to experience a deep-rooted conflict and power struggle arising from the fact that a teacher in Taiwan is traditionally endowed with greater power than his or her

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students, whereas younger people are expected to show respect to their elders. Hence, they frequently chose to address older students using forms that implied intergenerational relationships and to use code-switching to converge their own communication with their older students' preferred dialects. Implications for older-adult education and possible directions for further research are discussed in the conclusion.

Keywords: communication accommodation theory, older learners, senior education, Taiwan, teacher-student communication.

Introduction and Background

Continuing Education for Older Adults

The provision of continuing education for older adults has become a policy interest worldwide, notably in Canada, Japan (Hori & Cusack 2006), Australia (Swindell 1991), Finland (Yenerall 2003), the UK (Huang 2006) and also Taiwan (Huang 2005). Taiwan is a rapidly ageing country, and to enhance the quality of life of its older population, its government has been promoting senior-education and lifelong-learning programmes at educational institutions including universities and community-based learning centres.

The White Paper on Senior Education Policy published by Taiwan's Ministry of Education (Hsiao et al. 2014) has made clear that the purposes of senior-education programmes are to promote successful ageing, slow down ageing, reduce the social isolation of older people and cultivate positive attitudes towards ageing. The expected outcomes of providing continuing-education programmes or lifelong-learning activities for older learners generally include assisting them to remain active socially or increasing their psychological well-being and quality of life (Hammond 2004).

Some scholarship has proposed an association between participation in lifelong-learning activities in later life and successful ageing. Jenkins's (2011) UK-based survey, for example, revealed that older adults' participation in music, art and evening classes was strongly correlated to improvements in their life quality, well-being and life satisfaction. Lamb and Brady (2005) reported that older learners perceived four categories of benefits of lifelong learning: intellectual stimulation, experiencing a

nurturing and supportive community, enhancing self-esteem and having opportunities for spiritual renewal. Escuder-Mollon (2012) observed that, although senior learners were not motivated to continue learning for career purposes, they wished to improve their capacity to keep up with changes in society. It is also widely believed that elderly people's participation in lifelong-learning activities can help them take on new roles after retirement; enhance their physical, psychological and social functions; and eventually obtain opportunities to assess their life experiences (Moody 1976) during a life stage termed the "third age" (Laslett 1989).

Given that continuing education for older people appears to be a key to productive and successful ageing (Friedan 1993), it is important to investigate (1) the reasons for their participation, along with (2) what teaching practices teachers perceive as appropriate or necessary to a satisfying learning environment. Nevertheless, research on the roles language and communication play in the provision of high-quality senior education has been sparse.

A number of studies have examined the reasons older people participate in learning (for reviews, see Boulton-Lewis 2010; Ostiguy et al. 1998). Taken as a whole, it is indicated that the drivers of such participation include intellectual stimulation, acquisition of new knowledge, meeting new people and increasing opportunities to socialise or travel (see Knowlton 1977; Romaniuk & Romaniuk 1982), as well as self-fulfilment in a more general sense (Pincas 2007). These reasons reflect older people's expectations about what learning processes can be satisfying and provide various insights into what teachers can and should do differently for older, as compared to traditional, learners in the classroom.

Teaching Older Students: Considerations and Recommendations

As suggested by Pincas (2007), before designing any programme of teaching aimed at older learners, a teacher should consider several issues, for example, teacher–student relationships, older learners' *a priori* knowledge and competencies, the potential impact of the organisational or social contexts on learning, their motives for studying, or the perceptions about their own competence.

Villar et al. (2010) explored the adaptations teachers made for teaching older students at third-age universities in Spain, and they included

fostering a more relaxing and less rigid environment; giving students more control over the learning process; and playing a role as an organiser in class rather than just an instructor. Simplifying instruction for seniors was also recommend as a form of teaching adaptation because of the perceived changes in older learners' physical and cognitive abilities associated with ageing (Glass 1996; Jones & Bayen 1998; Twitchell et al. 1996). It seems that teachers of older students confront the inherent ambiguity of their role, that is, whether they are primarily educators or entertainers (Brady et al. 2003). Yet the relationships of this complex array of relational and role positions to such teachers' styles of communication with their older students have never been examined in detail.

Another important aspect of teaching practices in senior-education contexts is the persistence of discredited negative stereotypes about older learners (Baldi 1997; Broady et al. 2010; Githens 2007), especially given the countervailing image of third agers (Laslett 1989): retired individuals who use their new-found free time to pursue their personal ambitions and growth. Still socially active and physically fit, third agers now comprise the fastest-growing segment of older learners (see for instance Kim & Merriam 2004; Schneider 2003; Williamson 2000), making it even more urgent to avoid curriculum designs, teaching practices and teacherstudent communication rooted in negative ageist stereotypes – although researchers have largely ignored how this might be achieved.

In short, the existing literature has hardly focused any attention on questions related to the roles played by language in the delivery of high-quality senior education, despite it being the medium through which all social practices are made possible. Moreover, as noted in a review by Fisher (1998), the major streams of research on older-adult learning have traditionally addressed topics such as older adults' levels of participation in educational activities, their preferences for or reflections on instructional approaches, and the limits of their cognitive capabilities. In Taiwan, research on ageing and education has also mostly adopted a pedagogical orientation, exploring topics such as older adults' learning needs and motivations, adaptation to later life and social engagement, as well as course designs for older-adult learning (Yao 2014). Nevertheless, language and communication research with a focus on senior-education contexts is almost absent from the existing literature, with Lucas (2006)

representing an important exception to the rule. The aforementioned research gap necessarily makes this present study's attempt to understand contextually specific communication patterns involving older adult learners a preliminary one. The following section reviews the prior literature on the importance of language and communication in educational contexts, as further justification of the need to fill the identified research gap.

The Importance of Language and Communication in Educational Contexts

Effective teachers strive to enhance students' learning motivation, satisfaction and active engagement in class and thus enable them to achieve the desired educational outcomes. It would be unreasonable to propose that such an approach could succeed in the absence of effective teacherstudent communication; and indeed, a number of studies have highlighted the importance of language and communication in relation to students' learning behaviours (Goodboy & Myers 2008; Lin et al. 2017; Mazer & Hunt 2008; Myers 2002; Myers et al. 2014; Rocca 2004; Roorda et al. 2011; Witt et al. 2004). The studies reviewed in the following have focused on certain predetermined communicative features or qualities (i.e. aggressiveness, confirmation, immediacy, clarity, humour, or cool communication) and their associations with students' motivation levels, learning outcomes and learning satisfaction.

Myers (2002) found a positive correlation between instructor aggressiveness (a compound of argumentativeness and verbal aggressiveness) and students' self-reported state of motivation, affective learning, cognitive learning and satisfaction. Goodboy and Myers (2008) focused on teacher confirmation and identified the same pattern. Teachers' rhetorical (clarity and humour) and relational (immediacy, confirmation and caring) communication behaviours were also found to have positive impacts on students' learning and communication satisfaction (Myers et al. 2014). Lin et al. (2017), however, reported that instructors' argumentativeness and verbal aggressiveness were related to students' perceptions of the class-room communication climate and hence increased their learning anxiety; others have noted that students' appreciation of instructors' communication styles is essential not only to their learning satisfaction but also

to positive teacher-student relationships (Allen et al. 2008; Roorda et al. 2011). One way for teachers to enhance their classroom communication is to use styles that students can identify with, such as positive slang, a form of cool communication (Mazer & Hunt 2008). To a certain extent, Mazer and Hunt's finding approaches language accommodation as a means of building rapport with students.

Research Purpose

The studies reviewed in the preceding two sections were conducted mainly on the effects of teachers' communication styles on students and tended to ignore teachers' own views on the impact of their language and communication styles. No study has yet painted a comprehensive picture of what communication strategies and styles are considered appropriate by teachers, as well as what scenarios or conditions certain communication strategies are employed for. Likewise, there has been no empirical or systematic investigation of teacher–student communication in senior-education contexts. The main research purpose of the present study is to elicit Taiwanese senior-education teachers' views of the communication strategies or styles they adopt for teaching. This present study was also conducted to explore whether the reported communication strategies are used to fulfil their students' learning expectations or to satisfy other needs relevant to the delivery of teaching and learning.

What follows is a review of the theoretical framework in this study, communication accommodation theory (CAT), including themes such as *language*, *communication and ageist stereotypes* and *communication-accommodation strategies and adult education*, followed by a short discussion on teacher-student communication and Confucian influence in Taiwan.

Theoretical Framework

Communication Accommodation Theory

CAT (Giles 1973; Giles et al. 2007) provides a useful framework for the exploration of teachers' communication strategies for teaching older adult learners because it enables the description and explanation of why people modify their communication styles because of various contextual and

interactional conditions. Beginning in the 1970s, Giles and colleagues developed speech accommodation theory, rooted in the concepts of convergence, divergence and maintenance – each of which will be explained in more detail later. Via the steps set forth in Giles (2016), this theory evolved into CAT, which has since been applied in multidisciplinary research on a wide range of topics, including communication and ageing (Harwood et al. 1993), intergenerational communication (Giles & Gasiorek 2011) with a focus on under- and over-accommodative moves (Coupland et al. 1991), and classroom communication (Mazer & Hunt 2008). CAT is also considered a useful theoretical framework for the study of intergroup accommodation in relation to social identities or social categories (for a review, see Palomares et al. 2016).

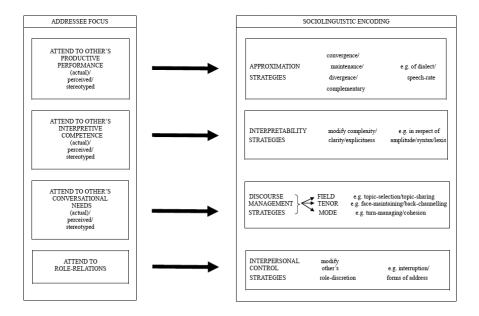
According to Coupland (2010: 19), "accommodation theory accounts for diverse contextual processes that impinge on the selection of sociolinguistic codes, styles and strategies and their interactional consequences." CAT was developed as a socio-psychological model illustrating the social and cognitive processes that mediate speakers' perceptions about their addressees and the modifications of their speech styles (Giles et al. 1987; Giles & Powesland 1975).

As shown in Figure 1 (Coupland et al. 1988: 28), speakers decide to converge, diverge, or maintain their speech styles when communicating with members of other social groups. Speech convergence refers to speakers changing their speech styles to be more similar to those of their hearers, so as to gain their approval or build identification. Divergence refers to speakers' attempts to disassociate themselves from their hearers in intergroup communication, by accentuating the speech differences between them. In comparison to these other two strategies, speech maintenance may sound rather neutral, but dissociative intentions can still be detected in it, given that "a general tendency to accommodate is operative in pro-social interpersonal interaction" (Coupland 2010: 23); in other words, simply deciding against convergence may reveal similar motives to active divergence.

Because communicative convergence can enable speakers to "seek approval, affiliation and/or interpersonal similarity as a manner of reducing social distance," it is perceived to be more efficient as well as more cooperative than the other two strategies (Soliz & Giles 2014: 108). Convergence is therefore the aspect of CAT of greatest interest in the present study, as

Figure 1. An extended model of sociolinguistic processes in communication accommodation theory

Source: Coupland et al. 1988: 28, also cited in Coupland et al. 1991: 29



it is assumed that teachers will use various communication-convergence strategies to accommodate older learners' needs. To the extent that such an approach succeeds, it can be expected to lead to the approval of older students and to stronger teacher-student relationships.

The communication-accommodation model proposed by Coupland et al. (1988: 26; see also Coupland et al. 1991; Figure 1), though not the most up-to-date version of CAT (see Ethala et al. 2016; Palomares et al. 2016), has been selected as the present study's guiding theoretical framework because it was developed in the context of research probing communication accommodation to older people: a scenario shared by the present study. Moreover, Coupland et al.'s (1988) version of CAT proposes a number of potential sociolinguistic processes by which communication accommodation may occur, and this allows the researcher to conceptualise

teachers' self-reported accommodation strategies in a more textured way. Specifically, as shown in Figure 1, this model of CAT offers four directions for the exploration of communication-accommodation strategies (see also Dragojevic et al. 2016). First, when a speaker's attention is on his or her partner's productive-language competence, he or she can employ approximation strategies, such as adjusting verbal or nonverbal communicative styles to converge or diverge from the interlocutor's. Second, if the accommodation is made based on the hearer's language-comprehension abilities, the speaker can employ interpretability strategies, such as decreasing the complexity of vocabulary, simplifying syntax and/or speaking louder to increase clarity and enhance comprehension. Third, to meet one's conversational partner's macro-conversational needs, one can employ discourse-management strategies, including topic selection and actions aimed at maintaining face. And fourth, interlocutors may rely on interpersonal control strategies, that is, the use of interruptions or various forms of address based on their perceived or actual relationships and statuses.

For Coupland (2010: 24), discursive accommodation includes "regulating how interpretable our talk is, and is designed to be, for our hearers." However, Coupland et al.'s (1988) CAT model's delineation of the potential scope of various accommodation strategies was based on research in universities in the UK and the United States and has not yet been empirically verified in other cultural or communicative contexts. In senior-education contexts in Taiwan, for example, details of the relative prevalence and specific content of approximation strategies, interpretability strategies, discourse-management strategies and interpersonal control strategies are simply unknown; nor can we be certain of the absence of additional strategies that are culturally or contextually specific to Taiwan or to senior education. These issues will be explored in the present study.

Language, Communication and Ageist Stereotypes

The preceding discussion has pointed out that accommodation strategies can be adopted in response to perceptions of one's conversational partner's language-reception and language-expression abilities. The existing literature has offered some insights into the expressive and receptive linguistic features associated with older individuals, but it must be borne in mind that such work can reinforce stereotypes, and should be challenged

given that language accommodation based on stereotypical expectations of older people's language comprehension and processing abilities can lead to over-accommodative and patronising communicative moves.

In terms of language production, Shadden's (1997) review of studies on discourse performance in normal older adults revealed that the synthetic length and complexity of sentences produced by older people were mostly lower than those produced by younger ones; the old-old, meanwhile, produced less information via greater verbal output than the young-old did. Even though older individuals' conversational skills tend to be preserved relatively well, more language problems are still reported to exist in older adults than in younger ones (Hummert et al. 1995; Shadden 1997). In addition to verbosity (Gold, Arbuckle & Andres 1994), older people's distinctive conversational styles have been found to include disclosing their ages (Coupland et al. 1989); focusing on troubles such as illness, family problems, or bereavement (Coupland et al. 1990); and frequently interrupting (Chen 2017) or requesting clarification (Kemper et al. 1998).

In terms of receptive-communication competence, older people tend to process information more slowly (Birren et al. 1980; Lima et al. 1991). This might be the result of a number of physical changes that come with ageing. For example, decline in memory as experienced in older age (Hess 2005; Wingfield et al. 1985) and decreasing hearing acuity (Hayes 1981; Orchik 1981) can influence older people's ability to retrieve information in conversations (cf. Hupet et al. 1993).

A number of terms have been coined for the communication styles adopted in conversations with older adults, including "patronising talk" (Ryan et al. 1995), "secondary baby talk" (Caporael 1981; Caporael et al. 1983) and "elderspeak" (Cohen & Faulkner 1986; Kemper 1994). In Kemper et al.'s (1998) study on the form and effects of practising elderspeak in a referential-communication task, it was noted that younger adults' instructions to older adults became shorter, simpler, slower and more repetitious. Other verbal characteristics of elderspeak may include more frequent pauses between utterances, lowered propositional density (Kemper et al. 1996), increased use of diminutive and endearment terms (Brown & Draper 2003), tag questions (Herman & Williams 2009), higher pitch, exaggerated intonation (Caporael 1981) and more interrogatives or imperatives (Ashburn & Gordon 1981). Collective plural pronouns like "us" appear to be commonly deployed to build a sense of solidarity between a

speaker and an older addressee (Makoni & Grainger 2002; Sachweh 1998). Furthermore, Hummert (1999) argued that negative age stereotypes are related to patronising communication with older people, and the defining strategies of patronising talk include simplification, clarification, demeaning emotional tone and low quality of talk (see also Hummert & Ryan 1996; Ryan et al. 1995).

It should be noted here that these communication styles tend to be triggered by negative stereotypes of older adults rather than by their actual communicative needs: that is, elderspeak, secondary baby talk and patronising talk are addressed not only to cognitively impaired older individuals but also to healthy ones. This can have distinctly problematic consequences. For instance, Kemper et al. (1998) found that, while the use of elderspeak did not actually help older adults comprehend better or more accurately, it could lower their self-evaluations of their communicative competence. Similarly, Ryan et al.'s (1986) model of the communication predicament of aging (CPA) explored a negative communicative feedback cycle rooted in over-accommodation to older adults' presumed deficiencies in communicative competence. Potential consequences of CPA include constrained opportunities for older adults to communicate (Harwood et al. 1997; La Tourette & Meeks 2000; Ryan et al. 1994), a sense of loss of personal control and self-esteem (O'Connor & Rigby 1996), lessened social interaction, or even reduced psychological activity (Baltes & Wahl 1996). As mentioned earlier, people's primary motivations for pursuing learning activities in later life are to seek self-fulfillment and become more socially active. Therefore, the aforementioned negative consequences of elderspeak must be carefully avoided in communication between teachers and older adult students.

Communication-Accommodation Strategies and Adult Education

A few prior studies have examined the application of language accommodation – mainly convergence strategies – in adult-education contexts, and the findings could shed some light on what teachers might need to consider when communicating with older adult learners. As pointed out by Mottet et al. (2004), adult students tend to feel more motivated to communicate with their instructors if the latter are using communication-accommodation strategies. Convergent accommodation in such contexts can be encouraged

and realised through various specific strategies: for example, allowing adult students to reflect on their own learning and views by building open communication environments (Wulff & Wulff 2004). The quality of teacheradult student communication can be enhanced by allowing adult students to maintain their own communication styles in class and by helping them feel comfortable and safe in class (Lucas 2006). Also, older adult students exhibit stronger needs than younger ones to be treated as equals, meaning that their teachers might need to be more sensitive to the impact of power or status differences on their communication (Lucas 2006).

It has also been found that communicative accommodation is more likely to be initiated by those who perceive themselves to be lower in status or less powerful (Gregory et al. 2000). This phenomenon is particularly important to consider when studying teacher-student communication in Chinese societies, because – as further discussed in the following section – age differences between teachers of senior education and their older students can engender power-asymmetry issues in communication. Giles and Dorjee (2004) have also pointed out that when teachers are much younger than their students, it can lead the former to adopt over-accommodative communication (i.e. patronising talk). Given that many teachers in senior-education contexts are much younger than their students, the present research will explore whether this pattern is replicated in Taiwanese data.

Teacher-Student Communication and Confucian Influence in Taiwan

It should be noted that the studies of language, communication and education reviewed were mainly conducted in Western societies and therefore are not necessarily generalisable to Taiwan, where teaching at all age levels is strongly circumscribed by Confucian doctrines. As observed by Pratt et al. (1998), the teacher-learner relationship in the Confucian tradition is likened to that of father and son or daughter. In other words, teachers in Chinese societies are expected to behave like fathers, exercising authority over their students; and this goes a long way toward explaining the power asymmetry that typifies Taiwanese teacher-student communication (Lu & Ung 2007) as well as Taiwanese teachers' extensive use of direct commands and an authoritative tone (Gao 1998). According to Huang (2005), because of Confucianism's influence on Taiwan's education system and

society more generally, older Taiwanese people spent their schooldays in a highly authoritarian learning environment and are accustomed to instructor-centred lectures, which remain the most common instructional practice in Taiwan's universities for older adults.

This picture is complicated, however, by filial piety: an important Confucian code of intergenerational relationship that endows older people with greater power and higher status than their juniors. Because senior-education teachers are very likely to be younger than their students, the dynamics of their communication in Taiwan may be particularly complicated and age-sensitive. It is therefore predicted that teachers in Taiwan may experience conflicts or difficulties in positioning themselves in relation to their older adult students in the process of classroom communication, because the Confucian tradition endows older people with greater power and higher status. Hence, when power is potentially derived both from the teacher's role and from the students' advanced age, which is greater? To further understand this issue, the choices of communication strategies in association with teachers' ages need to be investigated.

Research Questions

In sum, despite evidence that teachers' communication accommodation is linked to students' learning outcomes and satisfaction, hardly any exploration of such links in senior-education contexts has hitherto taken place. To understand the communication-accommodation strategies employed by Taiwanese teachers of older learners and the reasons to employ the strategies, this study will use Coupland et al.'s (1988) extended model of sociolinguistic processes in CAT as its theoretical framework and utilise its findings to create an extended CAT model specific to communication involving teachers and older adult students in Taiwan. The present work is divided into two studies, each guided by two research questions. Study 1, which is primarily interview-based, seeks to answer the following:

RQ1: What communication-accommodation strategies do teachers of older adult students in Taiwan report using in teacher-student communication?

RQ2: What are these teachers' rationales for adopting their reported communication-accommodation strategies?

Study 2, carried out by a survey, is guided by two additional questions. Firstly:

RQ3: What is the relative salience of the various communication-accommodation strategies identified by Study 1?

As discussed above in the theoretical framework section, age differences between teachers and their older adult students could influence their communicative interactions in class, perhaps in a patronising direction, because of age-based power asymmetry and/or social norms regarding showing respect towards older people in Taiwan. Thus:

RQ4: How are teachers' age ranges associated with the patterning of communication-accommodation strategies identified by RQ3?

Study 1 Design and Data

In order to answer RQ1 and RQ2, qualitative interviews were conducted to elicit more culturally and contextually specific accounts of the communication processes under study. As explained earlier, Coupland et al.'s (1988) extended CAT model provides a useful conceptual framework for this study, insofar as it explains teachers' choices of communication strategies in relation to at least four addressee or hearer-focused dimensions ("attend to others' productive performance"; "attend to others' interpretive competence"; "attend to others' conversational needs"; "attend to role relations"). In addition, teachers' self-reported communication-accommodation strategies can potentially realise one or more of four sociolinguistic dimensions, including approximation strategies (i.e. convergence vs. divergence), interpretability strategies (e.g. simplification of content), discourse-management strategies (e.g. choosing or avoiding particular topics) and interpersonal control strategies (e.g. choosing particular forms of address).

The total of eight addressee-focused and sociolinguistic dimensions mentioned were used as the starting point for the development of Study 1's semi-structured interview questions (see Appendix A). All were open-ended questions, allowing the interviewees to express their views about how best to communicate with older adult students and their rationales for such views. The questions covered which communication strategies were used by the interviewees (sociolinguistic encodings of

communication-accommodation strategies); how they perceived their roles in class or relationships with older adult students (attendance to role-relations); how they perceived older adult students' expressive and receptive language abilities (attendance to productive performance and interpretive competence); and how these perceptions influenced their communication with older students, as well as what communicative or conversational needs they perceived older adult students to have and how such perceptions influenced their teacher–student communication (attendance to conversational needs).

However, as this research also intends to extend Coupland et al.'s (1988) CAT model, the Study 1 interviewees were encouraged to provide other dimensions and considerations beyond the existing model to explain their communication-accommodation choices. Their age data were also collected at this time.

Nine female and six male participants (aged between 40 and 70) were invited to participate in the interview phase. The interviews, conducted from September to December 2014, yielded approximately 25 h of audio-recorded data in total. The author of this paper, acting as the interviewer, targeted six senior-education institutions, which can be categorised into three main distinct types of lifelong-learning sites in Taiwan, including three community-based activity centres (in Chia-Yi and Nantou), two universities for older adults (in Pingtung and Tainan) and a lifelong-learning organisation (in Kaohsiung). Four of the six sites were located in cities and two in the countryside. The recruited interviewees were a mixture of researcher's acquaintances and teachers who volunteered to take part in this study, following contact between the researcher and the heads or managers of the targeted senior-education sites.

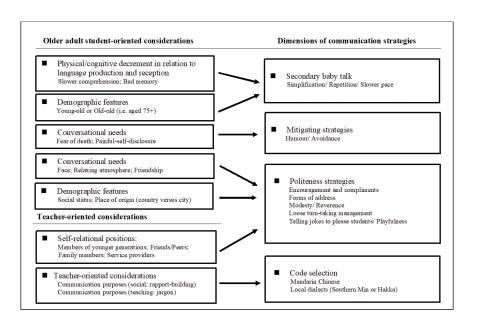
Consent forms were signed by the interviewees before the interviews commenced. It is worthwhile to note that the research processes as presented in this paper were reviewed by the National Cheng Kung University Human Research Ethics Committee, which issued an approval statement (Reference No. 103–286) indicating that the operation of the research followed the ethical guidelines required by Ministry of Science and Technology, Taiwan (the main body providing research funding to Taiwanese scholars).

The interview data were transcribed into Chinese for further analysis, and the transcripts were coded according to the main categories of

communication strategies reported by the participants. Some codes were created in line with relevant concepts as found in existing literature, for instance, secondary baby talk. Other codes were created to reflect the functions of the interviewees' chosen communication strategies, such as mitigation of certain unpleasant topics or demonstration of politeness to older students. In addition, the category of "code-selection" was utilised to explain the selection of language codes by teachers of older students, for reasons that will be discussed later.

What follows ("Study 1 Findings") presents the answers to RQ1 and RQ2. Figure 2 illustrates the relations between various dimensions of communication-accommodation strategies and the rationales the interviewees gave for adopting them, with the latter group further subdivided into student-orientated and teacher-orientated considerations.

Figure 2. Teachers' communication accommodation to older adult students in Taiwan: Considerations and strategies



Study 1 Findings

Secondary Baby Talk

The first category of communication-accommodation styles identified in the Study 1 data was named "secondary baby talk," because it exhibited certain conversational features characteristic of such talk. As suggested in prior literature, secondary baby talk features include simplification, repetition and slow-paced speech. The interviewees who used these communication techniques did so mainly because they perceived older adult students as having physical obstacles to language production and reception: for example, as comprehending concepts – especially theoretical ones – more slowly, and as having bad memories (see the category *physical/cognitive decrement in relation to language production and reception* in Figure 2). According to participants T2 (T stands for "teacher") and T13:

Older adult students understand difficult concepts rather slowly. Therefore, I would avoid using jargon and prefer simpler and colloquial language. (T2, aged 50, female)

Older adult students forget what they have learned very easily, so I just have to teach them the same thing again and again. (T13, aged 70, female)

Teachers' choices of the above communication strategies also seemed to depend on older adult students' chronological age ranges. The older they were, the more likely they were to become receivers of secondary baby talk styles. For example, as T4 explained:

I need to pay more attention to older adult students aged over 75 or 80 to help them understand what I teach by repeating or simplifying the content. This is because their reactions and learning progress are rather slow. They are very elderly so their brains do not function as well as those older students who are a bit younger. However, apart from those aged 75 or 80, most older adult students I teach have very quick comprehension and learning abilities, not worse than youngsters. (T4, aged 69, male)

To sum up, communication accommodation featuring secondary baby talk could be categorised as one of Coupland et al.'s (1998) interpretability strategies (see Figure 1). That is, Taiwanese teachers modified the complexity of the language they used for teaching older adult students because of older-age-related decrements in language abilities (as addressee-focused considerations).

Mitigating Strategies

There were certain painful topics, especially death, serious illness and bereavement, that the teacher participants tended to avoid in communication with older students. If avoidance of such topics was not possible, they would often use humour as a communication strategy. As T1 and T5 reported:

We don't talk about death because it is pointless, given that my students are still healthy [...]. The priority of engaging in lifelong learning activities is to look for happiness [... and] being happy can keep sickness away [...]; we should avoid triggering negative thoughts. (T1, aged 65, male)

If I really have to talk about death-related topics, I will tell jokes or present death in a humorous way, which makes older adult students feel amused and not afraid. (T5, aged 64, male)

During the interviews, the avoidance of death-related topics as an important aspect of teacher-student communication was raised by interviewees without being prompted by the interviewer through any direct questions such as "Do you avoid mentioning death in class?" or "What could be a taboo in class?" Rather, it arose naturally in the interview processes, implying these teachers' strong awareness of death as a taboo and of how referring to it without mitigation could compromise older learners' satisfaction with the learning climate.

Similar mitigation strategies were also applied in situations where older adult students disclosed painful experiences. For example, according to T11:

If my students mention sad things, I divert their attention to something else, more interesting and amusing [....] stopping them from thinking about troubles [... and] replacing them with topics that are more bright and positive [...]. I do not want to experience the sadness with them. (T11, aged 55, male)

In short, the observed avoidance strategy and use of humour, which could be categorised into Coupland et al.'s (1988) discourse-management strategies, functioned to mitigate the impact of raising topics stereotypically perceived to be difficult for older students and hence named as mitigating strategies in this present study (see Figure 2). Such communication-accommodation choices were made based on the teachers' perceived

addressee-oriented conversational needs to allow older students to experience happiness and satisfaction via communication processes that were free of unpleasant topics and did not provoke fears of death.

Politeness Strategies

The majority of the reported communication strategies in this study were related to the concept of politeness (see Figure 2). Politeness, according to Brown and Levinson (1987), can be positive or negative, respectively intended to appeal to a person's positive and negative face. According to Brown and Levinson (1987), positive face is a person's desire to be liked, appreciated and respected by others, while negative face describes his or her right to be free from imposition and desire to claim the freedom to take autonomous action as a competent and independent adult. Hence, in the present study, those communication strategies used to make older adult students feel appreciated and liked were perceived as positive politeness strategies, while those employed to prevent older adult students from feeling forced or controlled by teachers were regarded as negative politeness strategies. The various forms of politeness strategies are discussed later.

The current findings indicate that the teachers' use of positive politeness strategies included the giving of frequent encouragement and compliments to older adult students even when they had made little learning progress, verbal demonstrations of modesty or reverence, or telling jokes with the expressed aim of pleasing them. As to negative politeness strategies, they were in the form of avoiding strict control of turn-taking. Notably, the teachers presumed that these positive and negative face-enhancing strategies not only helped them build good relationships with their older students but also positively influenced the students' learning motivations. For example, T5 maintained that a teacher:

needs to keep encouraging and praising older students to make them feel like they are gaining face. Otherwise, they might give up when failing to remember the lessons or feel coerced when being asked to follow teaching instructions. (T5, aged 64, male)

Many of the interviewees prioritised face-maintenance in the process of teaching and were also aware of older students' desire to experience class as a relaxing communicative environment. One way of fostering such an environment was to tell jokes to please older students; as T4 commented:

I think the priority in communication involving teaching older adult students should be happiness rather than learning efficiency. They should not be made to sit still listening to the lecture, but allowed to have fun in a relaxing atmosphere. Therefore, it is good to tell jokes occasionally in class. (T4, aged 69, male)

Most interviewees also reported that they had been able to foster relaxing learning environments via loose turn-taking management: specifically, avoiding taking control of who was allowed to talk in class and when for the purpose of appealing to older students' negative face. This was markedly different from traditional teacher–student interaction in Chinese societies. As T4 argued:

Some older adult students come to the class only for making friends. That is why I do not stop them from chatting in class [... where] they should feel relaxed and carefree. (T4, aged 69, male)

The aforementioned communication-accommodation behaviours (i.e. encouragement and compliments, loose turn-taking management and telling jokes to please students) all fall into the discourse-management strategies category of Coupland et al.'s (1988) CAT model and are associated with the speaker's focus on the addressee's conversational needs including face maintenance and/or seeking a relaxing communicative atmosphere that will facilitate friendship development (see Figure 2).

In addition to these considerations reflecting older adult students' conversational needs, some of their demographic features – for instance, their social status and urban vs. rural origins – could have influenced the senior-education teachers' employment of politeness strategies. As T3 explained:

After teaching many older adult students in urban areas, I learned that they seem to be more sensitive and have more expectations of respect from others [...] since their social statuses tend to be higher. Unlike those in the cities, older adult students in the countryside are more passionate, pure and friendly. I would be more alert and careful when talking to those older adults who are considered elites and had well-regarded occupations before retirement. I need to pay attention to showing reverence and modesty to a greater extent and try not to offend them. (T3, aged 40, female)

For these reasons, T3 recommended that teachers tell more jokes and exhibit more "playfulness" in class when teaching in the countryside. T4 said that he provided more positive feedback and paid more respect to those older students with higher social status, such as those who used to be former teachers, military officers and civil service workers:

Because they are very intelligent, as their teacher, I need to make sure that I sound more modest and polite. To demonstrate modesty, I need to avoid giving my students, especially those with higher social status, direct correction of mistakes. (T4, aged 69, male)

It was found that senior-education teachers perceived themselves as having a dynamic and complex range of different roles and relationships with older adult students, and that the teachers' self-role positioning was not particularly straightforward. For example, as T3 put it:

Sometimes, I encounter a dilemma in defining my roles in class, and so do my students. I do not want to portray myself as a teacher; but if I simply interact with my students as someone younger, it is difficult for me to provide professional advice as an expert. (T3, aged 40, female)

Instead of categorising role-relations as a dimension of addresseeoriented considerations (as in Coupland et al.'s CAT model; see Figure 1), this study regards teachers' personal accounts of who they are to the older adult students as a teacher-oriented dimension (see Figure 2). The reason is that it is up to the teachers to decide what kinds of communication purposes they would like to prioritise, which later is associated with the types of relational roles (not the prescribed teacher-student one) they would like to take on as a consequence.

During communication with older adult students, the teacher participants – in addition to maintaining their prescribed institutional roles as teachers – would position themselves in one or more of the following four ways: as people from younger generations; as friends or peers; as family members; or as service providers. The teachers accommodated their communication styles to the personal choices they had made regarding which of these roles or relational positions they wanted to adopt. They also chose different forms of address to indicate these various relational positions to their older adult students (as will be discussed further in Study 2). Sometimes, the teachers' role-choices also functioned to appeal

to older students' positive face, and hence have been categorised as a form of politeness strategy in Figure 2. For example, as T7 mentioned:

I want to show intimacy and closeness to my students, so when I address them, I want them to feel like they are my relatives. That is why I call them grandmother/grandfather or uncle/aunty. (T7, aged 40, male)

T6 also supported the use of certain forms of address to indicate closeness:

Even though my students always call me teacher, I instead address them as sisters or brothers to make them feel close to me. (T6, aged 50, female)

In cases where a younger teacher felt a strong need to show respect to older students, or simply perceived his or her role as a service provider or someone younger, certain corresponding politeness strategies came to the fore: for example, giving high praise to students even when only little learning progress had been made. Again, the participants recommended the use of playful language and advised against serious or authoritative communication styles. For example, as T1 maintained:

I am much younger than my students and some of them can be as old as my father or grandfather. Therefore, when talking to them, I have to be polite and cannot treat them from the position as a teacher. Besides, teachers in senior education are like service providers, enabling older students to feel happy and relaxed in the process of learning, so my responsibility is to use playful language, like telling jokes or being humorous, instead of taking an authoritative tone, to teach them. Furthermore, it is important to keep giving compliments to older students when they make progress in learning, and even if they don't perform well, you still have to praise them. (T1, aged 65, male)

In a nutshell, the teacher participants reported using a number of communicative styles for the purpose of showing politeness to older adult students. These included encouragement and compliments; the use of various address forms (grandmother/grandfather, brother/sister, uncle/auntie) to indicate closeness; expressions of modesty and reverence; avoidance of strict turn-taking management in class; and the use of playful and humorous language. These communication accommodations enacted the sociolinguistic dimension of discourse-management strategies in Coupland et al.'s (1988) CAT model. The corresponding rationales reflected certain addressee-focused as well as speaker-focused considerations, including the older adult students' conversational needs (face, relaxing

atmosphere, friendship-seeking) and demographic features (social status, place of origin) as well as teachers' perceptions of their own roles in relation to older students.

Prioritised Communication Purposes and Code-Selection

Two teacher-oriented considerations, claiming an expert identity and prioritising teaching rather than rapport-building, were found to be associated with code-selection, another dimension of teachers' choices of communication strategies. In Taiwan, Mandarin Chinese is the official language, but two local dialects, Southern Min and Hakka, are spoken by the ethnic groups that correspond to their names. The former dialect is more prevalent and can be understood by Hakka people as well, whereas Hakka tends not to be comprehended by non-Hakka individuals. The interview data revealed that Chinese was considered more appropriate for presenting jargon or theory (see "Communication purposes (teaching: Jargon)" in Figure 2), while Southern Min was spoken mainly for social purposes and the provision of secondary examples to elaborate theories that had proved difficult to understand. The teacher participants would therefore code-switch between Chinese and Southern Min to fulfil one or both of the two communication purposes, specifically, teaching jargon and building rapport with older students. As T6 put it:

Generally, Chinese is spoken when talking about academic theories while Southern Min is used for chatting or giving examples to the theories. Basically, Southern Min sounds more friendly and easily accessible. (T6, aged 50, female)

T2 also supported the use of Southern Min for social purposes:

Chinese is used for serious purposes, while Southern Min is to give older adult students a break or to elicit small talk. (T2, aged 50, female)

Considered as a form of communicative convergence, code-switching can also indicate teachers' intention to show solidarity with their older adult students. As stated by T10:

When I teach older adults in a Hakka village, I force myself to learn some Hakka words from my Hakka students and speak some simple Hakka words with them even though I don't speak Hakka and usually use Chinese for teaching. (T10, aged 50, female)

In the case of convergence to Southern Min, as mentioned by T12:

I usually speak Chinese for teaching but older adult students in Tainan City really like to speak Southern Min. Hence, in order to increase closeness with my students there, I would switch to Southern Min. (T12, aged 60, female)

In other words, teachers' choices of which language to speak when communicating with their older adult students were based on one or both of the two main communication purposes: that is, maintaining the use of Chinese for teaching and converging with the local dialects preferred by the communities where the teaching was delivered. These communication-accommodation strategies were both congruent with the approximation-strategy dimension of Coupland et al.'s (1988) CAT model.

Study 1 Conclusions

The findings of Study 1 can be summed up in the following 10 statements.

- 1. Taiwanese teachers of older adults accommodate their communication styles to secondary baby talk (repetition, simplification and slow-paced speech) because of their perceptions that their students, especially those aged over 75, have low language-reception and language-expression abilities.
- 2. Mitigating strategies characterised by avoidance or humour are employed by these teachers to accommodate their older adult students' perceived communication or conversational needs arising from the fear of death, as well as their painful self-disclosures.
- 3. Teachers use encouragement and compliments as politeness strategies to accommodate older adult students' conversational needs for face maintenance.
- 4. Loose control of turn-taking in class is used as a communication strategy to accommodate older adult students' desire for a relaxing environment for both learning and friendship development.
- 5. Showing modesty and reverence in language is employed as a communication strategy particularly to accommodate older adult students who have high social status or are from cities. One expression of this strategy is the avoidance of direct correction of mistakes in class.

- 6. Telling jokes or showing playfulness in teaching language is a communication strategy used by teachers not only to accommodate older students' need to learn in a relaxing atmosphere but also those who are from the countryside.
- 7. Teachers choose various forms of address to reflect their own choices of role positions in relation to their older students or to demonstrate their politeness, reverence, or closeness.
- 8. When teachers are much younger than their students, it is more difficult for the former to activate their professional identities, and this leads them to rely instead on age identity during teacher–student communication. The corresponding communication-accommodation behaviour is aimed at emphasising politeness.
- 9. Senior-education teachers often see themselves as service providers, which triggers their use of an encouraging, positive and playful tone in their teaching language, as part of providing a pleasant and satisfying learning environment for older students.
- 10. Code-switching is used for both teaching and social purposes, and teachers of older students decide which of these functions to prioritise.

Study 1's qualitative data shed considerable light on the nature of teachers' communication-accommodation choices when teaching older students, as well as on the considerations that underpin such choices. Nevertheless, this data by itself cannot indicate the patterning and relative salience of each identified strategy. It is not clear, for instance, whether the potentially ageist strategy of secondary baby talk was endorsed or used by the majority of the teacher participants. Likewise, Study 1's findings provide only limited information about how their own and their students' ages influence teachers' approaches to teacher-student communication. Therefore, more exploration regarding this issue is needed; for instance, a quantitative exploration of the communication strategies identified in Study 1 might clarify whether younger teachers are more likely than their older counterparts to adopt patronising communication styles, as suggested in the prior literature, and/or whether teachers of differing ages use different forms of address to imply their age-relevant preferences regarding their relational positions when communicating with older students. Study 2, based on a quantitative survey approach, addresses these issues.

Study 2 Design and Data

To obtain the answers to RQ3 and RQ4, the Study 2 questionnaire survey was conducted in April 2015 to elicit information about the extent to which the four main categories of communication strategies identified in Study 1 were used by a larger pool of teacher participants, as well as the associations between teacher participants' age ranges – young, middle-aged, or older – and their use (or not) of each strategy.

Because Study 2 was conducted to add depth to the Study 1 data, its survey questions were created mainly in accordance with those asked in Study 1, slightly paraphrased. This was done to maintain a high degree of consistency between the communication phenomena under study in the two phases. The survey questions were all designed as categorical variables (see Appendix B). The age ranges for the three teacher participant age groups were 39 and below for the "young" category, 40–60 for the "middle-aged" category and 61+ for the "older" category.

RQ3 is an umbrella question, comprising five subquestions about (1) the choices of six main forms of address for older adult students; (2) the use of patronising communication strategies or secondary baby talk; (3) the use of politeness strategies; (4) the mitigation of death-related topics; and (5) code-selection. The six reported modes of address for older students included first name, "older brother" or "older sister," "student," "handsome guy" or "beauty," "grandpa" or "grandma," and "uncle" or "auntie." The subcategories of secondary baby talk consisted of avoidance of jargon and theories (i.e. simplification), slower pace of speaking and repetition. As to mitigating strategies, the questionnaire asked whether death-related topics were avoided or replaced with light-hearted subjects (humour). The group of politeness strategies consisted of four subcategories: avoidance of direct correction of mistakes; loose turn-taking management; giving encouragement and compliments; and telling jokes and being humorous to please students. The question regarding code-selection was phrased as "using the language older students prefer."

Of the 300 questionnaires distributed, 213 (71%) were completed. The author distributed and collected them in person from four study sites (all different from those targeted in Study 1) in central and southern parts of Taiwan, where senior-education teachers (including those from northern parts of Taiwan) were gathered to receive professional training required

by the government. These occasions provided the best opportunities for the researcher to approach senior-education teachers of various subjects, of different ages, and from different areas of Taiwan. Each respondent was given a convenience store voucher as compensation, along with a consent form.

Of the 213 respondents, one-third were young (31%; aged <39), half were middle-aged (53%, aged 40–60) and less than 2 in 10 were older (16%; aged 61+). Chi-square tests were conducted for the analysis of RQ4, and the results relating to both RQ3 and RQ4 are presented as follows.

Study 2 Findings

Choices of Forms of Address

As shown in Table 1, six alternatives for address forms could be chosen by the 213 respondents. The least common choices for the participants were to address their students as "uncle" or "auntie" (n = 31), "handsome guy" or "beauty" (n = 32) and "student" (n = 34). By far the most popular address forms were "grandpa" or "grandma" (n = 108) and "older brother" or "older sister" (n = 104). This suggested that, in this senior-education context, Taiwanese teachers tended not to position themselves in line with their professional roles but were likely to take the positions indicative of age differences (i.e. "grandpa" or "grandma") or respect (older students

Table 1. Modes of addressing older students, by teachers' ages (N = 213)

	Teachers' ages				
Forms of address	Young (<39)	Middle-aged (40-60)	Older (61+)	n	Chi-square
"Grandpa" or "grandma"	46%	48%	6%	108	<i>p</i> < 0.001
"Older brother" or "older sister"	16%	67%	17%	104	p < 0.001
First name	28%	53%	19%	43	Ns
"Student"	9%	59%	32%	34	p < 0.01
"Handsome guy" or "beauty"	16%	50%	34%	32	p < 0.01
"Uncle" or "auntie"	13%	81%	6%	31	<i>p</i> < 0.01

do not actually have to be older to be addressed as "older brother" or "older sister").

Chi-square tests revealed that the associations between forms of address and teachers' ages were significant in almost all cases, with the exception being the use of students' first names. Specifically, more middle-aged and older teachers chose to address their older adult students as "student" (59% and 32%) or as "handsome guy" or "beauty" (50% and 34%). In the case of addressing older students as "older brother" or "older sister," it was as common among the young (16%) as among the older (17%). Young and middle-aged teachers, on the other hand, preferred terms that implied intergenerational relationships, such as "grandpa" or "grandma" (46% and 48%) and "uncle" or "auntie" (13% and 81%).

Use of Patronising Communication Styles

The results of Study 1 revealed that Taiwanese teachers used patronising communication styles or features of secondary baby talk when talking with their older adult students, while Study 2 confirmed that three types of such communication strategies were adopted by the majority of the 213 survey participants. The adopted patronising communication styles consisted of "slower pace of speaking" (n = 166), "repetition" (n = 166) and "avoidance of jargon and theories" (n = 136).

As shown in Table 2, chi-square tests indicated that the associations between teachers' use of secondary baby talk and their own ages were

Table 2. Use of patronising communication styles, by teachers' ages (N = 213)

	,	Teachers' ages			
Patronising communication	Young Middle-aged Older (<39) (40-60) (61+)		п	Chi-square	
Slower pace of speaking	34%	49%	17%	166	ns
Repetition	34%	48%	18%	166	p = 0.05
Avoidance of jargon and theories	38%	46%	16%	136	<i>p</i> < 0.05

ns, not significant

significant in all cases except the use of a slower speaking pace. It was found that young and (especially) middle-aged teachers were more likely to employ all the reported patronising communication styles than older teachers.

Use of Politeness Strategies

Table 3 shows the extent to which the survey participants employed the four studied politeness strategies when communicating with their older adult students. The majority of the teachers reported using all four. The most commonly chosen politeness strategy was giving encouragement and compliments (n = 205), followed by using humour to please students (n = 180), avoiding direct correction of students' mistakes (n = 161), and adopting loose turn-taking management (n = 154).

There were no statistically significant associations between the teachers' ages and their use of any of the four politeness strategies, implying that these strategies were considered appropriate and necessary by teachers of all ages.

Code-Selection and Mitigation of Death-Related Topics

The last set of strategies, shown in Table 4, included the extent to which the teacher participants avoided dealing with death-related topics in class

Table 3. Use of politeness strategies, by teachers' ages (N = 213)

	Teachers' ages				
Politeness strategies	Young (<39)	Middle-aged (40-60)	Older (61+)	n	Chi-square
Giving encouragement and compliments	32%	52%	16%	205	ns
Telling jokes and being humorous to please students	29%	53%	18%	180	ns
Avoidance of direct correction of mistakes	29%	55%	16%	161	ns
Loose turn-taking management	51%	51%	18%	154	ns

Table 4. Code-selection and mitigation of death-related topics (N = 213)

	,	Teachers' ages			
Strategies	Young (<39)	Middle-aged (40-60)	Older (61+)	n	Chi-square
Using the language code older students prefer for communication	34%	49%	17%	166	<i>p</i> < 0.05
Avoidance of death-related topics or replacing them with light-hearted subjects	35%	52%	13%	85	ns

and how much accommodation they would make to the language codes or dialects preferred by their students. Less than half of the participants replaced death-related topics with light-hearted subjects (n = 85), while a vast majority reported using language codes preferred by older students (n = 166).

There was significant association between teachers' ages and code-switching as a form of convergent communication accommodations. Table 4 shows that in comparison with older teachers (17%), it was more common among young (34%) and middle-aged (49%) ones to accommodate to a language code preferred by older students.

Study 2 Conclusions

The answers to RQ3 can be summed up as follows:

- 1. The most frequently chosen forms of address for older students were "grandpa" or "grandma," or "older brother" or "older sister," rather than "student."
- 2. The use of patronising communication styles was prevalent among the majority of teachers of older students, especially "slower pace of speaking" and "repetition."
- 3. The use of politeness strategies was commonplace among the respondent teachers, especially "giving encouragement and compliments" and "telling jokes and being humorous to please students."

- 4. Death-related topics were avoided in communication with older students by two-fifths of the respondents.
- 5. Choosing the language code preferred by older students in class was considered appropriate by most of the respondents.

The answers to RQ4 can be summed up as follows:

- 1. Teachers in the two younger age groups tended to address older students in class in ways that reflected intergenerational identities. Younger teachers were the least likely of the three groups to adopt a professional identity in the classroom.
- 2. Middle-aged teachers were the most likely to use patronising communication styles while older teachers were the least likely to do so.
- 3. No significant association was found between teachers' ages and their use of politeness strategies.
- 4. No significant association was found between teachers' ages and their avoidance of death-related topics in communication with older students.
- 5. Middle-aged teachers were the most likely to use code-switching for communication with older students, while older teachers were the least likely to do so.

The following section presents a synthesis of the results derived from Study 1 and Study 2, along with discussion of their contributions, implications, limitations and potential directions for future research on this topic.

Discussion and Conclusion

Contributions

The present study is believed to be the first to systematically explain and describe teacher-student communication processes in senior-education contexts in Taiwan using a communication-accommodation framework. Another important contribution made by this study is its development of the context-specific language-accommodation model (illustrated in Figure 2), which extends Coupland et al.'s (1988) CAT model by including more dimensions of teacher rationales for their language-accommodation decisions when talking with and teaching older adult students.

These newly identified considerations include the older-student address-ees' demographic features (i.e. social status and rural vs. urban origin) and speaker-oriented considerations (i.e. what teachers prioritise within teacher-student communication and the relational positions that they subjectively perceive). The communication strategies discussed in this study add considerable depth to our understanding of how and why certain sociolinguistic encodings in Coupland et al.'s (1988) CAT model (e.g. politeness as a discourse-management strategy and secondary baby talk as an interpretability strategy) may be enacted in teacher-student communication in Asian senior-education contexts.

This study's revelation of interactional nuances that went beyond its research model implies that teacher-student communication in senioreducation contexts cannot be meaningfully categorised based solely on either party's chronological age. The complexities of the students' other social and demographic background characteristics clearly can render teachers' communication-accommodation decisions difficult to make. For instance, teacher-student communication in Taiwanese senior-education contexts can be intergroup communication between two ethnic groups, leading to teachers' convergent code-switching to individual students' preferred dialects in class, even where they do not really speak those dialects themselves. Teacher-student communication can also vary strongly along with individual teachers' perceptions of which communicative function they want to prioritise, for example, teaching or rapportbuilding. When communication is mainly for teaching rather than for social purposes, teachers appear more likely to maintain their own language code (usually Mandarin Chinese), even if it might not be preferred by older students in a particular class.

Teachers normally experience pressure to promote themselves to attract older students to choose their courses from a large pool of learning programmes. This interteacher or interclass competition factor has the effect of turning teachers from educators into service providers or marketers, which indirectly drives teachers in both the countryside and urban areas to notice differences in local older students' preferred communication styles. Hence, Taiwanese senior-education teachers demonstrate an ability to flexibly accommodate their communication to fit their students' conversational preferences – which are not determined by the latter's age alone, but by their places of origin, among other factors.

Communication Strategies Compromising Benefits of Senior Education

Arguably, the ways in which the current study's participant teachers chose to accommodate their conversational styles to fit their own perceptions of older adults' needs were grounded in negative stereotypes of later life (e.g. physical or cognitive decrement in relation to language production and reception). This should be a cause for concern to practitioners, because such negative perceptions about ageing could lead to over-accommodation (Ryan et al. 1986) and patronising communication. Those older students who are still fit and capable may not appreciate. Likewise, when teachers employ language styles featuring secondary baby talk, the effects of such communication – for instance, a sense of loss of personal control and self-esteem (O'Connor & Rigby 1996) – run directly counter to the senior-education ideal of promoting healthy and satisfying ageing.

It is noteworthy that the use of secondary baby talk was more prevalent among younger and middle-aged teachers. This seems consistent with prior research that indicated younger adults tend to perceive features of secondary baby talk as positive, that is, as conveying affection (Caporael 1981). Younger teachers might similarly regard communication strategies such as simplification, slower pace, or repetition as ways of conveying care and nurturing affection or perhaps as an aspect of the reverence towards older adults that is expected under Confucian norms. However, such findings may also imply that younger teachers, as compared to older ones, have lower expectations of older adult students and hence are more likely to consider secondary baby talk styles appropriate and effective. Though this may be true in some cases, many older students remain fully capable of learning, and over the long term teachers' lower expectations of their abilities could reinforce negative stereotypes of older age and hinder the possibilities of combating ageism and promoting positive ageing through the teaching process. Similar concerns could also apply to the use of other communication strategies, such as avoiding death-related topics.

Interestingly, avoidance of the topic of death was a common communication strategy among the sampled senior-education teachers, though it was practised only by two-fifths of the participants. Death is an inevitable consequence of ageing, and even though it is not exclusively experienced by older people, it is still a very important topic to deal with in later life.

As such, teachers' alienation from death could imply a social attitude of stigmatising ageing or older people.

Communication Strategies Enhancing Benefits of Senior Education

The participants broadly agreed with the idea that the use of appropriate language and communication strategies can enable them to build learning climates matching older students' various needs and hence facilitate the achievement of the expected goals of senior education. Arguably, the language used in the communication process between teachers and older students in Taiwan serves more affective purposes (i.e. satisfying older learners' negative and positive face) than instrumental functions (i.e. teaching effectively). This is evident in teachers' accounts of older students' social-psychological needs, which prioritise strong positive face, conversational needs and the students' expectations of a relaxing communication environment that will help enhance their social connections with others.

The use of politeness strategies by teachers of all ages indicates a common ideology that older students' social needs take priority over their learning needs. As part of this, teachers actively avoid correcting students' mistakes in senior-education contexts, give compliments and encourage them even when little progress has been made. Potentially, this can satisfy older learners' need to experience a sense of achievement. Furthermore, their feelings of being respected and endorsed by teachers could enhance their psychological well-being.

From the present Taiwanese sample, teacher-older student communications appeared to be more intergenerational than institutional in nature. This perspective was particularly notable among teachers in the younger and middle-aged groups, whose choices of address forms positioned them in terms of generational and age differences from their older students, whereas older teachers treated themselves more clearly as teachers. This finding points out a distinctive feature or complexity of classroom communication in senior educational contexts, at least in Taiwan. That is, as discussed earlier, power asymmetry between younger teachers and their older adult students can be expected because of the

influence of Confucianism. It is recommended that, in practice, teachers in Chinese cultures may need to be trained to deal better with intergenerational communication, in addition to how to create learning activities suitable to older learners' learning needs. This study, by taking language and communication into account, has revealed that students' gratifications obtained from participating in senior-education activities were derived not merely from educational efficiency but also from whether classroom communication facilitated the building of student-teacher or even interstudent rapport and the extension of social networks.

Implications for Practice

Based on the results as found in Study 1 and Study 2, a number of recommendations are given as follows for senior education practitioners to consider:

- 1. Teachers should be given more training aimed at building their awareness of potentially ageist communication styles that may be perceived by them as nurturing and polite but as patronising by older students, especially those who have not suffered any marked decrement in their physical or cognitive abilities.
- Teachers' diverse self-positioning as family members, friends, or brothers or sisters of their students can be an effective communicative strategy for downplaying the power asymmetry in interactions between teachers and students, or between two generations, and thus to successfully foster closeness and rapport between older students and their teachers.
- 3. Senior-education teachers do not need to play the authoritative roles that are normally expected of teachers in Confucian societies. The multiple hats they wear as marketers, service providers and educators allow them to adopt communication strategies such as humour and playfulness that enable them to convey learning content in a more pleasant and accessible way.
- 4. Older students' social and psychological needs surrounding learning should be prioritised over teachers' needs to accomplish their

- teaching goals or complete their curricula. This tends to explain why most of the considerations self-reported by the sampled senior-education teachers were student-oriented.
- 5. Showing politeness to older students is a fundamental norm in teacher-student communication in Taiwanese senior-education contexts, and not merely among the younger teachers, who in the context of Confucianism are assumed to experience the greatest pressure to demonstrate it. Teachers can use various strategies to demonstrate their respect to older students in class, such as encouragement, loose control of students' in-class discussions, non-correction of mistakes, being modest and using playful language.
- 6. The theme of death can be integrated into senior-education programmes to help older students deal with it when it approaches. This is not to suggest, however, that it is a subject to be dealt with *only* by older students or that it should only be associated with ageing. Teachers of all ages need to be given more training on how to raise this topic in a more neutral manner while talking with older students, or at least be reminded that merely mentioning it is unlikely to upset or offend older students, whereas distancing classroom discourse from this topic can do nothing to cultivate positive ageing.

Limitations and Suggestions for Future Research

This study has several limitations that must be noted. First, the data only represent one side of the teacher-student communication processes. Teachers' self-reported accounts of their communication-accommodation behaviours may accurately reflect what they believe their older students expect, but this study did not directly investigate such students' actual preferences for or against the discussed communication strategies. Future research should therefore explore the level of consistency between the communication behaviours perceived as appropriate by teachers and older students' needs and expectations and should assess whether the communication strategies reported in the present study would, in practice, be regarded as under-accommodative or over-accommodative by

older students in Taiwan. It would also be worthwhile to investigate older adult students' rankings of the satisfaction they obtained from receiving the various kinds of communication strategies identified in this research, to further verify such strategies' relative levels of effectiveness.

It should also be noted that teacher-student communication processes do not simply consist of the accommodations teachers make to students but also those made by students to their teachers, for a variety of reasons. This issue has not been examined in the present work. Future research should therefore seek to capture communication-accommodation strategies from the older learners' side and to understand what interactional norms such learners perceive as appropriate for communication with teachers of various ages.

Lastly, the interview data examined in this research reflected teachers' perceptions and its self-reported nature means that its exact relationship to real classroom interactions is less than clear. Future research could incorporate video-recording of teachers' communication with older students to obtain, for instance, nonverbal features of their communication-accommodation behaviours. Discourse analysis could also be used as an alternative approach to studying transcribed teacher-student conversations and might reveal the conversational mechanisms negotiated by the participants, as opposed to those predetermined by social norms in senior-education contexts.

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References

- Allen, J. L., Long, K. M., O'Mara, J. & Judd, B. B. (2008). Students' predispositions and orientations toward communication and perceptions of instructor reciprocity and learning. *Communication Education* 57(1): 20–40.
- Arbuckle, T. Y. & Gold, D. P. (1993). Ageing, inhibition, and verbosity. *Journal of Gerontology* 48(5): 225–232.
- Ashburn, G. & Gordon, A. (1981). Features of a simplified register in speech to elderly conversationalists. *International Journal of Psycholinguistics* 8(3): 7–31.
- Baldi, R. A. (1997). Training older adults to use the computer: Issues related to the workplace, attitudes, and training. *Educational Gerontology* 23(5): 453–465.
- Baltes, M. M. & Wahl, H. W. (1996). Patterns of communication in old age: The dependency-support and independence-ignore script. *Health Communication* 8(3): 217–231.
- Birren, J. E., Woods, A. M. & Williams, M. V. (1980). Behavioral slowing with age: Causes, organization, and consequences. In L. M. Poon (ed.), *Aging in the 1980s: Psychological Issues* (pp. 293–308). Washington, DC: American Psychological Association.
- Boulton-Lewis, G. M. (2010). Education and learning for the elderly: Why, how, what. *Educational Gerontology* 36(3): 213–228.
- Brady, E. M., Holt, S. R. & Welt, B. (2003). Peer teaching in lifelong learning institutes. *Educational Gerontology* 29(10): 851–868.
- Broady, T., Chan, A. & Caputi, P. (2010). Comparison of older and younger adults' attitudes towards and abilities with computers: Implications for training and learning. *British Journal of Educational Technology* 41(3): 473–485.
- Brown, A. & Draper, P. (2003). Accommodative speech and terms of endearment: Elements of a language mode often experienced by older adults. *Journal of Advanced Nursing* 41(1): 15–21.
- Brown, P. & Levinson, S. (1987). *Politeness: Some Universals in Language Usage*. Cambridge: Cambridge University Press.
- Caporael, L. R. (1981). The paralanguage of caregiving: Baby talk to the institutionalized aged. *Journal of Personality and Social Psychology* 40(5): 876–884.

- Caporael, L. R., Lukaszewski, M. P. & Culbertson, G. H. (1983). Secondary baby talk: Judgments by institutionalized elderly and their caregivers. *Journal of Personality and Social Psychology* 44(4): 746–754.
- Chen, C. H. (2017). First-encounter talks between younger and older adults in Taiwan: A conversation analysis approach. *International Journal of Society, Culture & Language* 5(2): 91–104.
- Cohen, G. & Faulkner, D. (1986). Does 'elderspeak' work? The effect of intonation and stress on comprehension and recall of spoken discourse in old age. *Language and Communication* 6(1–2): 91–98.
- Coupland, N. (2010). Accommodation theory. In J. Jaspers, J. Verschueren & J. O. Östman (eds.), *Society and Language Use* (vol. 7, pp. 21–27). Amsterdam: John Benjamins.
- Coupland, N., Coupland, J. & Giles, H. (1989). Telling age in later life: Identity and face implications. *Text: Interdisciplinary Journal for the Study of Discourse* 9(2): 129–152.
- Coupland, N., Coupland, J. & Giles, H. (1991). Language, Society and the Elderly: Discourse, Identity and Ageing. Oxford: Blackwell.
- Coupland, N., Coupland, J., Giles, H. & Henwood, K. (1988). Accommodating the elderly: Invoking and extending a theory. *Language in Society* 17(1): 1–41.
- Coupland, N., Henwood, K., Coupland, J. & Giles, H. (1990). Accommodating troubles-talk: The young's management of elderly self-disclosure. In G. M. McGregor & R. White (eds.), Recreation and Response: Hearer Creativity and the Analysis of Spoken and Written Texts (pp. 112–144). London: Croom Helm.
- Dragojevic, M., Gasiorek, J. & Giles, H. (2016). Accommodative strategies as core of the theory. In H. Giles (ed.), *Communication Accommodation Theory: Negotiating Personal Relationships and Social Identities across Contexts* (pp. 36–59). Cambridge: Cambridge University Press.
- Escuder-Mollon, P. (2012). Modelling the impact of lifelong learning on senior citizens' quality of life. *Procedia: Social and Behavioral Sciences* 46: 2339–2346.
- Ethala, M., Giles, H. & Harwood, J. (2016). Conceptualizing the diversity of intergroup settings: The web model. In H. Giles & A. Maass (eds.), *Advances in Intergroup Communication* (pp. 301–316). New York: Peter Lang.

- Fisher, J. C. (1998). Major streams of research probing older adult learning. *New Directions for Adult and Continuing Education* 1998(77): 27–39.
- Friedan, B. (1993). The Fountain of Age. New York: Simon and Schuster.
- Gao, M. (1998). *Influence of Native Culture and Language on Intercultural Communication: The Case of PRC Student Immigrants in Australia*. Available on http://www.immi.se/intercultural/nr4/gao.htm (Accessed: August 25, 2017)
- Giles, H. & Dorjee, T. (2004). Communicative climates and prospects in crosscultural gerontology. *Journal of Cross-Cultural Gerontology* 19(4): 261–274.
- Giles, H. & Gasiorek, J. (2011). Intergenerational communication practices. In K. W. Schaie & S. Willis (eds.), *Handbook of the Psychology of Aging* (pp. 231–245). New York: Elsevier.
- Giles, H. & Powesland, P. F. (1975). Speech Style and Social Evaluation. London: Academic Press.
- Giles, H. (1973). Accent mobility: A model and some data. *Anthropological Linguistics* 15(2): 87–105.
- Giles, H. (2016). The social origins of CAT. In H. Giles (ed.), *Communication Accommodation Theory: Negotiating Personal Relationships and Social Identities across Contexts* (pp. 1–12). Cambridge: Cambridge University Press.
- Giles, H., Mulac, A., Bradac, J. & Johnson, P. (1987). Speech accommodation theory: The first decade and beyond. In M. L. McLaughlin (ed.), Communication Yearbook (vol. 10, pp. 13–48). Beverly Hills, CA: Sage.
- Giles, H., Willemyns, M., Gallois, C. & Anderson, M. C. (2007). Accommodating a new frontier: The context of law enforcement. In K. Fiedler (ed.), *Social Communication* (pp. 129–162). New York: Psychology Press.
- Githens, R. P. (2007). Older adults and e-learning: Opportunities and barriers. *Quarterly Review of Distance Education* 8(4): 329–338.
- Glass, J. C., Jr. (1996). Factors affecting learning in older adults. *Educational Gerontology* 22(4): 359–372.
- Gold, D. P., Arbuckle, T. Y. & Andres, D. (1994). Verbosity in older adults. In M. L. Hummert, J. M. Wiemann, & J. F. Nussbaum (eds.), *Interpersonal Communication in Older Adulthood: Interdisciplinary Theory and Research* (pp. 107–129). Thousand Oaks, CA: Sage.
- Goodboy, A. K. & Myers, S. A. (2008). The effect of teacher confirmation on student communication and learning outcomes. *Communication Education* 57(2): 153–179.

- Gregory, S., Green, B., Carrothers, R., Dagan, K. & Webster, S. (2000). Verifying the primacy of voice fundamental frequency in social status accommodation. *Language & Communication* 21(1): 37–60.
- Hammond, C. (2004). Impacts of lifelong learning upon emotional resilience, psychological and mental health: Fieldwork evidence. *Oxford Review of Education* 30(4): 551–568.
- Harwood, J., Giles, H., Fox, S., Ryan, E. B. & Williams, A. (1993). Patronizing young and elderly adults: Response strategies in a community setting. *Journal of Applied Communication Research* 21(3): 211–226.
- Harwood, J., Ryan, E. B., Giles, H. & Tysoski, S. (1997). Evaluations of patronizing speech and three response styles in a non-service-providing context. *Journal of Applied Communication Research* 25(3): 170–195.
- Hayes, D. (1981). Central auditory problems and the ageing process. In D. S. Beasley & G. A. Davis (eds.), *Ageing: Communication Processes and Disorders* (pp. 257–266). New York: Grune and Stratton.
- Herman, R. E. & Williams, K. (2009). Elderspeak's influence on resistiveness to care: Focus on behavioral events. *American Journal of Alzheimer's Disease and Other Dementias* 24(5): 417–423.
- Hess, T. M. (2005). Memory and ageing in context. *Psychological Bulletin* 131(3): 383–406.
- Hori, S. & Cusack, S. (2006). Third-age education in Canada and Japan: Attitudes toward aging and participation in learning. *Educational Gerontology* 32(6): 463–481.
- Hsiao, C.-B., Liao, S. C. & Tzeng, J.-N. (2014). 老人教育福利服務:臺中市長青學苑評鑑後之研究分析[Education and welfare services for senior citizens: An analysis after Taichung evergreen academy evaluation]. 社會發展研究學刊 15: 28–47.
- Huang, C. S. (2005). The development of a university for older adults in Taiwan: An interpretive perspective. *Educational Gerontology* 31(7): 503–519.
- Huang, C. S. (2006). The university of the third age in the UK: An interpretive and critical study. *Educational Gerontology* 32(10): 825–842.
- Hummert, M. L. & Ryan, E. B. (1996). Toward understanding variations in patronizing talk addressed to older adults: Psycholinguistic features of care and control. *International Journal of Psycholinguistics* 12(2): 149–169.

- Hummert, M. L. (1999) A social cognitive perspective on age stereotypes. In T. M. Hess & F. Blanchard-Fields (eds.), *Social Cognition and Ageing* (pp. 175–196). San Diego, CA: Academic Press.
- Hupet, M., Chantraine, Y. & Nef, F. (1993). References in conversation between young and old normal adults. *Psychology and Ageing* 8(3): 339–346.
- Jenkins, A. (2011). Participation in learning and wellbeing among older adults. *International Journal of Lifelong Education* 30(3): 403–420.
- Jones, B. D. & Bayen, U. J. (1998). Teaching older adults to use computers: Recommendations based on cognitive ageing research. *Educational Gerontology* 24(7): 675–689.
- Kemper, S. (1994). Elderspeak: Speech accommodations to older adults. *Ageing and Cognition* 1(1): 17–28.
- Kemper, S., Othick, M., Gerhing, H., Gubarchuk, J. & Billington, C. (1998). The effects of practicing speech accommodations to older adults. *Applied Psycholinguistics* 19(2): 175–192.
- Kemper, S., Othick, M., Warren, J., Gubarchuk, J. & Gerhing, H. (1996). Facilitating older adults' performance on a referential communication task through speech accommodations. *Ageing, Neuropsychology, and Cognition* 3(1): 37–55.
- Kim, A. & Merriam, S. B. (2004). Motivations for learning among older adults in a learning in retirement institute. *Educational Gerontology* 30(6): 441–455
- Knowlton, M. P. (1977). Liberal arts: The Elderhostel plan for survival. *Educational Gerontology* 2(1): 87–93.
- La Tourette, T. R. & Meeks, S. (2000). Perceptions of patronizing speech by older women in nursing homes and in the community. *Journal of Language and Social Psychology* 19(4): 163–173.
- Lamb, R. & Brady, E. M. (2005). Participation in lifelong learning institutes: What turns members on? *Educational Gerontology* 31(3): 207–224.
- Laslett, P. (1989). A Fresh Map of Life: The Emergence of the Third Age. London: Weidenfeld and Nicolson.
- Lima, S. D., Hale, S. & Myerson, J. (1991). How general is general slowing? Evidence from the lexical domain. *Psychology and Ageing* 6(3): 416–425.
- Lin, Y., Durbin, J. M. & Rancer, A. S. (2017). Perceived instructor argumentativeness, verbal aggressiveness, and classroom communication

- climate in relation to student state motivation and math anxiety. *Communication Education* 66(3): 330–349.
- Lu, L. & Ung, K. C. (2007). 師生的心理傳統性與現代性、關係契合性對師生互動品質及學生心理福祉的影響 [Psychological traditionality, modernity and academic advisor-student fit and their influence on the quality of the relationship and students' well-being]. 本土心理學研究 27:81–118.
- Lucas, L. S. (2006). Building a Communication Foundation in Adult Education: Parterning Adult Learning Theory with Communication Accommodation Theory in Androgogical Settings. Unpublished master's thesis. Arlington, TX: University of Texas.
- Makoni, S. & Grainger, K. (2002). Comparative gerontolinguistics: Characterizing discourses in caring institutions in South Africa and the United Kingdom. *Journal of Social Issues* 58(4): 805–824.
- Mazer, J. P. & Hunt, S. K. (2008). 'Cool' communication in the classroom: A preliminary examination of student perceptions of instructor use of positive slang. *Qualitative Research Reports in Communication* 9(1): 20–28.
- Moody, H. R. (1976). Philosophical presuppositions of education for old age. *Educational Gerontology* 1(1): 1–15.
- Mottet, T., Martin, M. & Myers, S. (2004). Relationships among perceived instructor verbal approach and avoidance relational strategies and students' motives for communicating with their instructors. *Communication Education* 53(1): 116–122.
- Myers, S. A. (2002). Perceived aggressive instructor communication and student state motivation, learning, and satisfaction. *Communication Reports* 15(2): 113–121.
- Myers, S. A., Goodboy, A. K. & Members of COMM 600. (2014). College student learning, motivation, and satisfaction as a function of effective instructor communication behaviors. *Southern Communication Journal* 79(1): 14–26.
- O'Connor, B. P. & Rigby, H. (1996). Perceptions of baby talk, frequency of receiving baby talk and self-esteem among community and nursing home residents. *Psychology and Ageing* 11(1): 147–154.
- Orchik, D. J. (1981). Peripheral auditory problems and the ageing process. In D. S. Beasley & G. A. Davis (eds.), *Ageing: Communication Processes and Disorders* (pp. 243–265). New York: Grune and Stratton.

- Ostiguy, L., Hopp, R. & MacNeil, R. (1998). Participation in lifelong learning programs by older adults. *Ageing International* 24(2–3): 10–23.
- Palomares, N., Giles, H., Soliz, J. & Gallois, C. (2016). Intergroup accommodation, social categories, and identities. In H. Giles (ed.), *Communication Accommodation Theory: Negotiating Personal Relationships and Social Identities across Contexts* (pp. 123–151). Cambridge: Cambridge University Press.
- Pincas, A. (2007). How do mature learners learn? *Quality in Ageing and Older Adults* 8(4): 28–32.
- Pratt, D. D., Kelly, M. & Wong, W. (1998). *The Social Construction of Chinese Models of Teaching*. Available on http://newprairiepress.org/cgi/viewcontent.cgi?article=2019&context=aerc (Accessed: June 15, 2017)
- Rocca, K. A. (2004). College student attendance: Impact of instructor immediacy and verbal aggression. *Communication Education* 53(2): 185–195.
- Romaniuk, J. G. & Romaniuk, M. (1982). Participation motives of older adults in higher education: The Elderhostel experience. *The Gerontologist* 22(4): 364–368.
- Roorda, D. L., Koomen, H. M., Spilt, J. L. & Oort, F. J. (2011). The influence of affective teacher-student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of Educational Research* 81(4): 493–529.
- Ryan, E. B., Giles, H., Bartolucci, G. & Henwood, K. (1986). Psycholinguistic and social psychological components of communication by and with the elderly. *Language and Communication* 6(1–2): 1–24.
- Ryan, E. B., Hummert, M. L. & Boich, L. H. (1995). Communication predicaments of ageing: Patronizing behavior toward older adults. *Journal of Language and Social Psychology* 14(1–2): 144–166.
- Ryan, E. B., Meredith, S. D. & Shantz, G. B. (1994). Evaluative perceptions of patronizing speech addressed to institutionalized elders in contrasting conversational contexts. *Canadian Journal on Ageing* 13(2): 236–248.
- Sachweh, S. (1998). Granny darling's nappies: Secondary babytalk in German nursing homes for the aged. *Journal of Applied Communication Research* 26(1): 52–65.
- Schneider, K. (2003). The significance of learning for aging. *Educational Gerontology* 29(10): 809–823.
- Shadden, B. B. (1997). Discourse behaviours in older adults. *Seminars in Speech and Language* 18(2): 143–157.

- Soliz, J. & Giles, H. (2014). Relational and identity processes in communication: A contextual and meta-analytical review of communication accommodation theory. *Annals of the International Communication Association* 38(1): 107–144.
- Swindell, R. F. (1991). Educational opportunities for older persons in Australia: A rationale for further development. *Australian Journal of Education* 35(2): 175–186.
- Twitchell, S., Cherry, K. E. & Trott, J. W. (1996). Educational strategies for older learners: Suggestions from cognitive aging research. *Educational Gerontology* 22(2): 169–181.
- Villar, F., Celdran, M., Pinazo, S. & Triado, C. (2010). The teacher's perspective in older education: The experience of teaching in a university for older people in Spain. *Educational Gerontology* 36(10–11): 951–967.
- Williamson, A. (2000). Gender issues in older adults' participation on learning: Viewpoints and experiences of learners in the University of the Third Age (U3A). *Educational Gerontology* 26(1): 49–66.
- Wingfield, A., Poon, L. W., Lombardi, L. & Lowe, D. (1985). Speed of processing in normal ageing: Effects of speech rate, linguistic structure, and processing time. *Journal of Gerontology* 40(5): 579–585.
- Witt, P. L., Wheeless, L. R. & Allen, M. (2004). A meta-analytical review of the relationship between teacher immediacy and student learning. *Communication Monographs* 71(2): 184–207.
- Wulff, S. & Wulff, D. (2004). 'Of course I'm communicating; I lecture every day': Enhancing teaching and learning in introductory statistics. *Communication Education* 53(1): 92–102.
- Yao, C. T. (2014). 臺灣高齡教育學位論文研究取向分析探討與省思 [Analysis, exploration and reflection of research orientation for Taiwan elderly education dissertation]. 育達科大學報 38: 97–122.
- Yenerall, J. D. (2003). Educating an aging society: The University of the Third Age in Finland. *Educational Gerontology* 29(8): 703–716.

Appendix A. Interview Questions

- 1. How old are you?
- 2. What communication strategies would you consider when communicating with older adult students?
- 3. How do you perceive your roles in class and your relationships with older adult students in the process of communication with them?
- 4. How do you perceive older adults' expressive and receptive language abilities? Are they in any way related to how you communicate with them in class?
- 5. Do you think older adult students have certain conversational or communicative needs that influence how you communicate with them?
- 6. Are there any other considerations, in addition to those mentioned above, related to how you communicate with older adult students in class?

Appendix B. Questionnaire Questions

1. How old are you? \square young (39 and younger) \square middle-aged (40–60) \square older (61+) 2. Which of the following forms of address do you use for older adult students?

Form of address	Yes	No
First name		
Older brother/older sister		
Student		
Handsome guy/beauty		
Grandpa/grandma		
Uncle/auntie		

3. Do you use any of the following communication strategies in your teaching of older adult students?

Communication strategies	Yes	No
1. Secondary baby talk		
Avoidance of jargon and theories		
Slower pace of speaking		
Repetition		
2. Mitigating strategies		
Avoiding death-related topics or replacing them with light-hearted subjects		
3. Politeness strategies		
Avoidance of direct correction of mistakes		
Loose turn-taking management		
Giving encouragement and compliments		
Telling jokes and being humorous to please students		
4. Code-selection		
Using the language older students prefer		