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Running head: SOCIAL SUPPORT & MEMORY

The sharing of autobiographical memories elicits social support

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Abstract

We examine whether and how the autobiographical memories that we share can influence the social support that people offer us. Study 1 examined whether sharing specific (e.g., *I was upset when reading my ex-partner's email last Friday*) versus nonspecific (e.g., *I was upset*) memories influences support giving. Studies 2 and 3 additionally examined the effects of episodic detail (i.e., who, what, where) and specificity on support. Participants offered more support to (hypothetical) profiles that shared specific, compared to non-specific, memories, but these effects were less consistent than those for memory detail. Participants offered more support to profiles that shared memories that were high, compared to low, in detail. Findings were more consistent for the effects of memory detail on emotional support than instrumental support. These findings support the social function of autobiographical memory and suggest one pathway through which autobiographical memory may influence the help we receive.

Keywords: emotional support; instrumental support; overgeneral memory; specificity; episodic memory

Introduction

Difficulty recalling specific autobiographical events from one's past has been associated with a range of different psychiatric diagnoses (Barry et al., 2021). Specific autobiographical memories refer to temporally discrete events (e.g., *I was happy when playing football my child last Saturday*; Williams et al., 2007; Williams & Broadbent, 1986). Theories that attempt to explain how reduced autobiographical memory specificity can lead to psychopathology focus on *intrapersonal* cognitive factors, such as impaired emotion regulation (Williams et al., 2007). Recently, research has begun to examine the *interpersonal* social factors that might explain this association. People who have difficulty retrieving specific memories report themselves as receiving low levels of social support over the next year which in turn predicts increases in psychopathological symptoms (Barry, Vinograd, et al., 2019). This correlational research assumes that the social support that people receive is contingent on their sharing specific autobiographical memories with the person supporting them. It may be easier to engage listeners when sharing specific, as opposed to non-specific or general, memories (e.g., *when I play with my child*). However, to our knowledge, no experimental study has directly examined this hypothesis.

Social support refers to the resources that people provide each other developing and maintaining relationships (Bradbury et al., 2000; Sias & Bartoo, 2007). Although several types of social support exist, emotional (providing a listening ear) and instrumental support (providing a solution to a problem) have been referred to as the most “salient and encompassing” forms of social support, within which all other forms of social support can be categorised (Shakespeare-Finch & Obst, 2011). It is possible that people may receive more of these kinds of support if they share more about themselves with other people. Indeed, there is meta-analytical evidence that we like others more if they disclose more information about

themselves to us (Collins & Miller, 1994). However, the content of what is disclosed is also likely to moderate the social effects of disclosure.

Early theorists suggested that memories that are shared with more emotion and detail were likely to solicit more caring and intimacy from other people (Tannen, 1990). The additional meaning that detailed memories include might help the sharer to meet their interpersonal goals (Pillemer, 1992) and might facilitate the listener to relate more to the story being told (Schank & Abelson, 1995). The act of reminiscing with other people can enhance people's positive mood (Pasupathi & Carstensen, 2003), can boost feelings of intimacy and warmth (Alea & Bluck, 2007) and can lead to higher ratings of closeness when compared to discussions of non-self-related topics (Beike et al., 2016). Sharing information about ourselves, and in particular, specific, detailed autobiographical memories, may therefore serve to strengthen our relationships with others, explaining why people are more likely to support others who are better able to retrieve specific memories (Barry, Vinograd, et al., 2019). To our knowledge, no study has experimentally examined how the sharing of specific autobiographical memories can influence social support. A recent related investigation found that autobiographical narratives that are more coherent can also confer greater instrumental support on the listener than those that are low in coherence (Vanaken et al., 2020); however, this study did not measure the specificity or detail of the memories shared within the narratives despite the primacy of specificity within psychiatric research (Barry et al., 2021).

The present investigation examined to what extent participants were likely to offer emotional and instrumental support to other (hypothetical) people based on the (artificial) autobiographical memories that are included within their profiles. We also asked participants to what extent they would be willing to collaborate with these people in a possible follow-up study. Study 1 examined the extent to which participants offer support to profiles based on

whether they included specific autobiographical memories or non-specific or general memories. The findings from previous studies in this area (e.g., Alea & Bluck, 2007; Beike et al., 2016) do not allow us to delineate the effects of sharing specific memories compared to memories that are rich in episodic detail or other personal information. It is possible that people may prefer profiles simply because they share *more detailed* memories (Collins & Miller, 1994) and not necessarily because they share *specific* memories. This is important because specific memories typically include more episodic detail than non-specific memories (Hallford et al., 2021). Nevertheless, specificity and detail are separable constructs; a person could retrieve a specific memory that is high in sensory-perceptual detail (e.g., *I was upset when reading my ex-partner's email last Friday while sitting on the sofa in my house*) or low in such detail (e.g., *I was upset when reading an email last Friday*). Similar differences in sensory-perceptual detail can also be present in memories that are non-specific. The study by Barry, Vinograd, et al. (2019) did not code memory detail. As such, Study 2 of the present investigation examined whether people were offered more support to profiles if they included specific high-detail memories, compared to specific low-detail memories or general memories that were high or low in detail. A pre-registered replication of this was then conducted in Study 3.

All studies included only women participants. here are gender differences in the nature and function of memory sharing (Ross & Holmberg, 1992; Webster, 1995) and the extent to which social support is given and received (Dalgard et al., 2006). As many of the real memories used in Study 1 often included details or events that might be construed as gendered, we sought to avoid any potential confounding effect of gender by focusing on understanding how autobiographical memory sharing can contribute to differences in social support amongst groups of women.

Study 1

Data and scripts for all studies are available on OSF (Goffen et al., 2022).

Method

Participants

A-priori analysis of required sample size for a dependent means *t*-test suggested that a sample of 156 participants had 80% power to detect small effects ($d = .20$) with alpha of .05. We recruited 158 Dutch speaking participants (all women; $M_{age} = 22.03$; $SD_{age} = 2.20$).

Participants were recruited through advertisements placed on social media related to the senior author's institution. Accordingly, participants were mostly students ($n = 123$; 77.8%); one participant was unemployed (0.6%) and the remaining participants were in full-time employment (34; 21.5%). Given the nature of the profiles included in the study, and to reduce the possibility of participants' gender or age confounding their interpretation of the profiles, participants were all women and were aged between 18 and 28 years. To compensate participants for their time, they were entered into a prize draw for low value vouchers (€20) for a local multimedia store.

Measures

The task included three profiles of fictitious people which included ten specific memories each, and three profiles of fictitious people with included ten general (memories of categorical events that did not occur at specific time and which are likely to have occurred more than once) memories each. To enhance ecological validity, memories were selected from an existing dataset of memories given by women between 18 and 28 years. These memories were given in response to a mixture of positive and negative cue words: *pleasant*, *angry*, *interesting*, *hurt*, *proud*, *annoyed*, *social*, *clumsy*, *enthusiastic*, and *disappointed*. Each profile was accompanied by a hypothetical name that was randomly allocated to each profile. For example, a specific profile of *Emma* included the memories: Pleasant, *I considered it pleasant that I received positive feedback at the final day of my internship*; Angry, *Five years*

ago, when I caught my boyfriend cheating on me; Disappointed, Last week Thursday, I thought that I disappointed somebody by making a mistake in an assignment. A general profile of Sanne: Pleasant, Whenever I'm under a cosy blanket in front of the television with a glass of wine; Angry, Whenever my schedule is messed up because of somebody else's fault; Disappointed, Whenever I believe that it's Friday, but it's only Tuesday.

We adapted the measure used by Shakespeare-Finch and Obst (2011) – and which has also been used elsewhere (Vanaken et al., 2020) – to capture both emotional and instrumental support. Emotional support was measured using three questions: *I would be there to listen to her, I would look for ways to cheer her up, and I would try to reassure her.* In accordance with the analysis procedure of others that have used similar measures (Shakespeare-Finch & Obst, 2011; Vanaken et al., 2020), responses to each question were summed for each hypothetical person. These sum scores were then averaged for each of the three specific profiles and the three general profiles that participants were introduced to. The process of summing within-profile and averaging across profiles was also done for responses to the two questions related to instrumental support: *I would help her when she's too busy to get everything done, I would help her with her responsibilities when she would be unable to fulfill them.* In addition to the measures created elsewhere (Shakespeare-Finch & Obst, 2011), we additionally measured the extent to which participants would collaborate with the hypothetical person: *Would you be willing to collaborate with here in the context of a possible follow-up study?* Participants responded to each of these questions on Likert scales from 0 (certainly not) to 100 (certainly). The scores for the collaboration question were averaged across the three specific and three general profiles, respectively. As such, each participant had six scores for mean emotional and instrumental support and willingness to collaborate for profiles that included specific memories and profiles that included general

memories. The internal consistency was good for the emotion items ($\omega^h = .71$) and instrumental items ($\omega^h = .88$).

Procedure

The study was approved by the Social and Societal Ethics Committee of the senior author's institution (Ref: G- 2018 03 1188). The study was administered online using Qualtrics. After providing informed consent and their demographic information, participants were told that they would be introduced to six persons by means of several memories that they each previously reported in response to cue words. Participants were told that they would be given a questionnaire (see OSF for exact instructions given) where they would be asked about how they would behave towards the participant and whether they would work with them in a subsequent follow-up study. Participants were presented with the profiles and their accompanying memories in random order. Each profile was presented simultaneously with the questions for emotional and instrumental support and willingness to collaborate. Each profile remained on the screen until participants responded.

Results

Data were analysed using *R* version 3.6.3 (R Core Team, 2020). One-sided, paired samples *t*-tests analysed whether, within-participants, higher mean scores for emotional and instrumental support and willingness to collaborate were evident for profiles that included specific memories compared to those that included general memories.

Analysis of skewness and kurtosis for each of the three indices suggested that the data were moderately skewed (most extreme skew value = -0.65) and the kurtosis values were acceptable (most extreme kurtosis value = -0.5).

Participants reported that they would offer greater emotional support to profiles that included specific memories than those that included general memories, $M_{diff} = 6.52$, 95%CI[1.99, ∞], $t(157) = 2.381$, $p = .009$, $d = .14$ (see Figure 1A). There was no difference

in the amount of instrumental support that participants reported that they would offer, $M_{diff} = 2.49$, 95%CI[-0.71, ∞], $t(157) = 1.288$, $p = .100$, $d = .06$ (see Figure 1B), or their willingness to collaborate, $M_{diff} = 1.59$, 95%CI[-0.57, ∞], $t(157) = 1.220$, $p = .112$, $d = .08$ (see Figure 1C).

Discussion

The findings of Study 1 suggested that participants were more likely to offer emotional support to profiles that included specific memories about their autobiographical past, than profiles that included more general memories. However, memories that are specific are also typically higher in detail than those that are not specific (Levine et al., 2002) and sharing more detail about oneself is associated with more positive regard from others (Collins & Miller, 1994). As such, it is possible that the observed effects are a function of the disclosure of *detailed information* within the profiles' autobiographical past and not necessarily the result of sharing a *specific* instance. Study 2 examined this possibility within a similar design but by using fictitious profiles that included specific memories that were high or low in detail or general memories that were high or low in detail. In addition, Study 2 focused solely on memories related to negative cue words, as it was assumed that there may be valence-related differences in support giving but examining valence effects was beyond the scope of the present investigation.

Study 2

Method

Participants

Participants in Study 2 were also recruited through social media. The same a-priori power analysis as was used in Study 1 informed the size of each group in Study 2. However, due to additional counterbalancing in this study, each group was oversampled. As in Study 1, all participants were Dutch speaking women aged between 18 and 28 years. We recruited 231

women ($M_{age} = 21.61$; $SD_{age} = 2.16$). Participants were mostly students ($n = 179$; 77.5%); four participants were unemployed (1.7%) and the remaining were in full-time employment ($n = 48$; 20.8%). Participants also received the same compensation as in Study 1.

Measures

In Study 2, participants were presented with four profiles: specific high detail, specific low detail, general high detail and general low detail. In this study, participants were told that the people in the profiles had been presented with four cue words and that they had provided a memory for each. Given the difficulty of finding memories that were balanced for specificity and detailedness, unlike in Study 1, the memories were created by the researchers. In each case, specificity was determined by the presence or absence of a reference to a specific time and two additional episodic details were either present or absent (for high vs. low detail, respectively). For example, for memories related to the cue *sad*: Specific and high detail, *Last Sunday night when I felt lonely at home in the sofa in front of the television*; Specific and low detail, *Last Sunday night when I was feeling lonely*; General and high detail, *Every time that I feel lonely at home in the sofa in front of the television*; General and low detail: *Every time that I feel lonely*.

Four memories, one for each variant of specificity/detail were created for each of 16 themes related to negative cue words such as *sad*, *stressed*, *hopeless*, *impatient*, *frustrated*, *anxious*, *disappointed*, etc.. Sixteen themes were necessary to ensure that the four profiles each participant was presented with each had four thematically unique memories in them. Then, to ensure that participants' responses were not contaminated by the themes present within the profiles that they were shown, the themes present in each profile were counterbalanced between participants. This resulted in 24 counterbalancing conditions, and so there were approximately 10 participants per counterbalance (See supplementary materials for vignettes and a full table of counterbalance conditions).

Participants responded to the questions on the same 0-100 Likert scales as in Study 1. The sum of the three emotional support items were again computed for each hypothetical person, as in Study 1. The internal consistency was good for the emotion items ($\omega^h = .77$). Both items measuring instrumental support in Study 1 referred to helping the person in the profile but each question referred to specific instances in which help would be given. To make this operationalisation of instrumental support more inclusive, a single item was given for instrumental support in Study 2 (*I would try to help her*). The same item for willingness to collaborate was given in Study 2 as in Study 1. These scores were not summed. Each participant had twelve scores for mean emotional support, instrumental support and collaboration likelihood for the person who reported specific memories and who was detailed, the person who reported specific memories and was not detailed, the person who reported general memories and was detailed and the person who reported general memories and was not detailed.

Procedure

The study was approved by the Social and Societal Ethics Committee of the senior author's institution (Ref: G- 2019 01 1476). The procedure of Study 2 was identical to that of Study 1.

Results

Data were analysed using *R* version 3.6.3 (R Core Team, 2020) and the *afex* package (Singmann et al., 2020). Three repeated measures ANOVA with two within-subjects factors (Specificity: Specific vs. General; Detailedness: High vs. Low) were computed for scores for each of the three indices (emotional support, instrumental support and collaboration).

Analysis of skewness and kurtosis for each of the twelve indices suggested that the data were moderately skewed (Most extreme skew value = -0.96) and the kurtosis values were acceptable (Most extreme kurtosis value = 1.25).

In the analysis of emotional support, there was evidence of a main effect of detail, $F(1, 230) = 3.934, p = .049, \eta_p^2 = .02$, but no main effect, $F(1, 230) = 0.003, p = .957, \eta_p^2 = .00$, or interaction with specificity, $F(1, 230) = 0.906, p = .342, \eta_p^2 = .00$ (See Figure 2A). The main effect of detail was explained by greater offerings of emotional support for profiles that were detailed compared to those that were less detailed.

In the analysis of instrumental support, there was no main effect of detail $F(1, 230) = 1.204, p = .274, \eta_p^2 = .01$, or of specificity, $F(1, 230) = 0.985, p = .322, \eta_p^2 = .00$, and no interaction between detail and specificity, $F(1, 230) = 0.022, p = .881, \eta_p^2 = .00$ (See Figure 2B).

The findings in the analysis of collaboration corroborated those of the analysis of emotional support. In particular, there was a main effect of detail, $F(1, 230) = 5.443, p = .021, \eta_p^2 = .02$, and no main effect, $F(1, 230) = 1.415, p = .235, \eta_p^2 = .01$, or interaction with specificity, $F(1, 230) = 1.384, p = .241, \eta_p^2 = .01$ (See Figure 2C). Again, participants reported that they would be more likely to collaborate with profiles that included more detailed memories compared to those that were less detailed.

When these three models were repeated and counterbalance was added as an additional between-subjects factor, there were no significant effects of counterbalance on emotional or instrumental support or collaboration.

Discussion

In contrast to Study 1, Study 2 found that participants were more likely to offer support to profiles that included memories that were high in episodic detail. This contrast is likely attributable to the fact that memories that are specific are also typically higher in detail than non-specific memories (Hallford et al., 2021). Similar to Study 1, these effects were not observed for instrumental support. As the findings of Study 2 contrasted with our original hypotheses regarding specificity and because the sizes of the effects were small, we

conducted an additional study to examine whether the significant effects of detail, and non-significant effects of specificity, would replicate; and, whether the significant effects for emotional support/collaboration but not for instrumental support would also replicate. Study 3 included pre-registered hypotheses, methodology and analyses (<https://osf.io/6fv4t/>). In addition, as the distinction between emotional and instrumental support could be a function of differences in the number of items that assessed these constructs, Study 3 measured both constructs with three items each.

Study 3

Method

Participants

The sample size estimate, recruitment method and compensation were the same as in Study 2. A minimum sample size of 216 was planned but as there were 24 counterbalancing, we recruited 10 participants per counterbalancing condition, such that 240 Dutch speaking women aged between 18 and 28 years ($M_{age} = 21.42$; $SD_{age} = 2.06$) were recruited.

Participants were mostly students ($n = 211$; 87.9%); one participant was unemployed (0.4%) and the remaining participants were in full-time employment ($n = 28$; 11.7%).

Measures

Participants were presented with the same profiles as in Study 2. The measures of emotional support and willingness to collaborate were also the same as in Study 2. In Study 3, instrumental support was measured using three questions: 1) *I would help her when she's too busy to get everything done*; 2) *I would help her with her responsibilities when she would be unable to fulfill them*; and, 3) *I would offer her financial help when she needs it*. The internal consistency was good for the emotion items ($\omega^h = .76$) and instrumental items ($\omega^h = .79$).

Procedure

The study was approved by the Social and Societal Ethics Committee of the senior author's institution (Ref: G-2020-2816-R2(MAR)). The procedure of Study 3 was identical to that of Study 2.

Results

The analysis procedure was the same as for Study 2. Analysis of skewness and kurtosis for each of the twelve indices suggested that the data were moderately skewed (Most extreme skew value = -1.01) and the kurtosis values were mostly acceptable (Most extreme kurtosis value = 2.33, all other kurtosis values between 1.25 and -0.59).

In the analysis of emotional support, there were main effects of detail, $F(1, 239) = 12.899, p < .001, \eta_p^2 = .05$, and specificity, $F(1, 239) = 6.034, p = .015, \eta_p^2 = .03$. The interaction between specificity and detail was not significant, $F(1, 239) = 0.034, p = .854, \eta_p^2 = .00$ (See Figure 3A). The main effect of detail was explained by greater offerings of emotional support to profiles that included more detailed memories compared to those that were less detailed. The main effect of specificity was explained by greater offerings of emotional support to profiles that were specific than those that were general.

In the analysis of instrumental support, there was a main effect of detail $F(1, 239) = 8.347, p < .001, \eta_p^2 = .03$, but no main effect of specificity, $F(1, 239) = 0.342, p = .559, \eta_p^2 = .00$, and no interaction between detail and specificity, $F(1, 239) = 0.193, p = .661, \eta_p^2 = .00$ (See Figure 3B). More instrumental support was offered to profiles that were high in detail, compared to those that were low in detail.

The findings in the analysis of collaboration corroborate those of the analysis of emotional support. There were main effects of detail, $F(1, 239) = 20.371, p < .001, \eta_p^2 = .08$, and specificity, $F(1, 239) = 7.251, p = .008, \eta_p^2 = .03$. The interaction between specificity and detail was not significant, $F(1, 239) = 0.010, p = .921, \eta_p^2 = .00$ (See Figure 3C). People were more likely to indicate that they wanted to collaborate with profiles that were more detailed

compared to those that were less detailed and those that were specific than those that were general.

When these three models were repeated and counterbalance was added as an additional between-subjects factor, there was a significant three-way interaction between counterbalance, specificity and detail for emotional support, $F(23, 216) = 1.591, p = .047, \eta_p^2 = .15$, and a significant interaction between counterbalance and detail for instrumental support, $F(23, 216) = 1.833, p = .014, \eta_p^2 = .16$. However, in each of these models, all other significant effects of Specificity/Detail remained the same (Refer to R script for a full outline of these results), indicating that the findings were not influenced by any particular profiles.

General discussion

We report three studies that examine whether people are more likely to offer social support to profiles of (fictitious) people that shared specific and detailed autobiographical memories.

The findings offer experimental evidence for the suggestion that the autobiographical memories that one shares can influence the social support that others offer (Barry, Vinograd, et al., 2019; Vanaken et al., 2020). In particular, Study 1 and Study 3 supported the correlational evidence of Barry, Vinograd, et al. (2019) that people are more likely to receive social support if they share specific autobiographical memories. Although the findings of Study 2 suggested that detail may be more important than specificity, Study 3 indicated that there are unique effects of specificity and detail in influencing the emotional support that is offered to others and our willingness to collaborate with them. These findings support suggestions that autobiographical memory specificity and detailedness are related but distinct constructs (Hallford et al., 2021; Levine et al., 2002).

These findings also contribute to a growing body of literature regarding the social function of autobiographical memory and the suggestion that the memories that we share with others can influence our relationships with them. Previous research in this area suggests

that our findings may be because the sharing of detailed memories might evoke stronger mental imagery and increase the likelihood that the listener can relate to some detail of the events being shared (Schank & Abelson, 1995) and then reminisce about their own similar experiences (Pasupathi & Carstensen, 2003). It could also be that divulging more detail about our autobiographical past might confer to others that we are open and keen to engage them. This might explain why such sharing is associated with higher intimacy, warmth and closeness (Alea & Bluck, 2007; Beike et al., 2016). In the present study, profiles that shared more detailed and more specific memories may have conferred to the participants that these (hypothetical) people were willing to share more about themselves and participants responded in turn as though they would be willing to support such people. Further examination of the mechanisms that underly these effects is therefore warranted. In accordance with other studies, it is important that future studies now examine such variables as liking, warmth and closeness (Alea & Bluck, 2007; Beike et al., 2016).

In addition, although we compared high and low detailed memories, it is possible to create memories that include far more detail than those included here. Future investigations could examine whether the effects observed here increase linearly with detail or whether at some level of detail support giving begins to plateau or perhaps even decrease. That is not to say that the association between memory and support giving is unidirectional. Taken together, the findings of this investigation and others indicate that social support and autobiographical memory may operate bidirectionally. Although we show that the quality of the memories that we share may influence other people's willingness to support and collaborate with us, social support has also been found to protect people from reductions in autobiographical memory specificity (Chiu et al., 2019; Raes et al., 2005) that might otherwise be expected following significant negative life events (Barry et al., 2018; Ono et al., 2015). As such, the more social support we receive following stressful events, the more

specific our memory will be (Chiu et al., 2019) and the more specific we are, the more other people are likely to support us.

It is of note that there were discrepancies in our findings for instrumental support between the studies. There were no significant effects of specificity on instrumental support in any of the studies. Also, although there were no effects of detail for instrumental support in Study 2, there was a significant effect of detail in Study 3. This may be because the way of measuring instrumental support in Study 2, *I would try to help her*, was not sufficient at capturing variability in responses between participants. However, when this question was extended to include helping the person in the profile when they are busy, helping with their responsibilities and helping with their finances, participants offered more of these forms of instrumental support to profiles that shared high detail memories, just as they had for the questions concerning emotional support.

There were also discrepancies between instrumental support and other dependent variables, whereas the findings for emotional support and willingness to collaborate seemed to parallel one another. This may be attributable to the gender of participants. We recruited women to avoid possible confounding effects of gender. Our findings align with suggestions that women may be more likely than men to share memories with one another to encourage intimacy rather than to direct others' instrumentally (Webster, 1995), and that, following negative life events, women may benefit more from emotional support than instrumental support (Knoll et al., 2007). Similar moderating effects may also be evident based on the age of participants. Participants in our study were young adults but it is possible that age may influence support giving, based on the different ways that young and old people report and use their memories (Alea & Bluck, 2003) and differences between age groups in their prosocial behaviours (Mayr & Freund, 2020). In addition, our study was confined to Dutch-speaking European participants and there is emerging evidence that the effects observed here

may differ as a function of culture (Guan & Wang, 2022). Future research should explore to what extent men and women, young and old, and European and Asian participants differ in some of the effects observed here.

Many of our observed effects were in the small to moderate range for partial eta-squared and there were some inconsistencies between studies, such as in the effect of specificity for emotional support that was present in Study 3 but not Study 2. A priori power analyses indicated that our samples were well-powered, but the novelty of our studies may have meant this was not the case. It is possible that autobiographical memory variables exert only small, but meaningful, effects on social support. Given that the same memories, and in the case of emotional support the same questions, were used in Study 2 as in Study 3, until further research is conducted it remains unclear why there were inconsistencies between these studies. Nevertheless, whether it is specificity or detail that exerts effects on social support, the way in which we share our autobiographical memories can influence people's willingness to offer emotional and instrumental support to us.

It is possible that there are important, unaccounted for, moderators that explain some of the variability that exists between our participants and explains the effect sizes we observed here. We did not measure variables related to social cognition and disclosure tendencies that may be associated with participants' support-giving. Participants' own tendency to disclose information about themselves may influence the extent to which they appreciate the disclosures of others (Collins & Miller, 1994). In addition, participants are more supportive of others' when responding to situations that they themselves are familiar with (Egbert, 2003). If participants are familiar with the experiences that are reported by the sharer in their autobiographical memories, this may confer greater liking and more supportive action than if they are less familiar with the events being reported. In the same study, supportiveness was moderated by participants' mood such that participants were more

supportive after they were induced to be happy compared to if they were induced to be sad (Egbert, 2003). Future research should measure these potential moderators.

Several limitations are of note. Intuitively, one might assume that detail, and perhaps also specificity, may be confounded with sentence length (i.e., the number of words included). However, supplementary analyses (available in the supplementary code within OSF) for Study 3, where length was added as a covariate, did not change any of the observed significant effects reported. Nevertheless, given the ad hoc nature of this analysis, future studies should account for the length of profiles within their design.

Also, participants were told that the profiles were real people who they might have to collaborate with on a subsequent task, but we did not measure whether they believed these instructions. There is conflicting evidence regarding the extent to which people are similarly willing to offer to cooperate in hypothetical versus real situations (Locey et al., 2011; Vlaev, 2012) but it remains possible that the hypothetical nature of our study influenced our findings. Our study was additionally artificial in that it involved one-way disclosures to the participant whereas everyday interaction typically involves reciprocity between people. There is evidence that people prefer interactions that involve reciprocal disclosures (Sprecher et al., 2013). It may be that people are more willing to offer support during interactions where they too can share memories. Research in naturalistic settings is now needed to take this area forward.

The present findings have implications related to the role that social support plays in the formation and maintenance of friendships (Sias & Bartoo, 2007) and romantic relationships (Bradbury et al., 2000). In addition, the present findings indicate that specificity and episodic detail may be separable constructs, with some evidence of differential effects on outcomes such as social support. Future autobiographical memory specificity studies should delineate these constructs. There are also implications for interventions for autobiographical

memory specificity that involve the sharing of memories within a group context, such as Memory Specificity Training (MeST; (Raes et al., 2009). Although MeST is premised on the training of specificity, MeST also involves training participants to generate memories with high levels of episodic detail (Martens et al., 2019; Raes et al., 2009). MeST studies should separate whether MeST's effects on emotional disorders are due to improvements in specificity or detailedness and whether improvements in autobiographical memory coincide with improvements in social support (Barry, Sze, et al., 2019).

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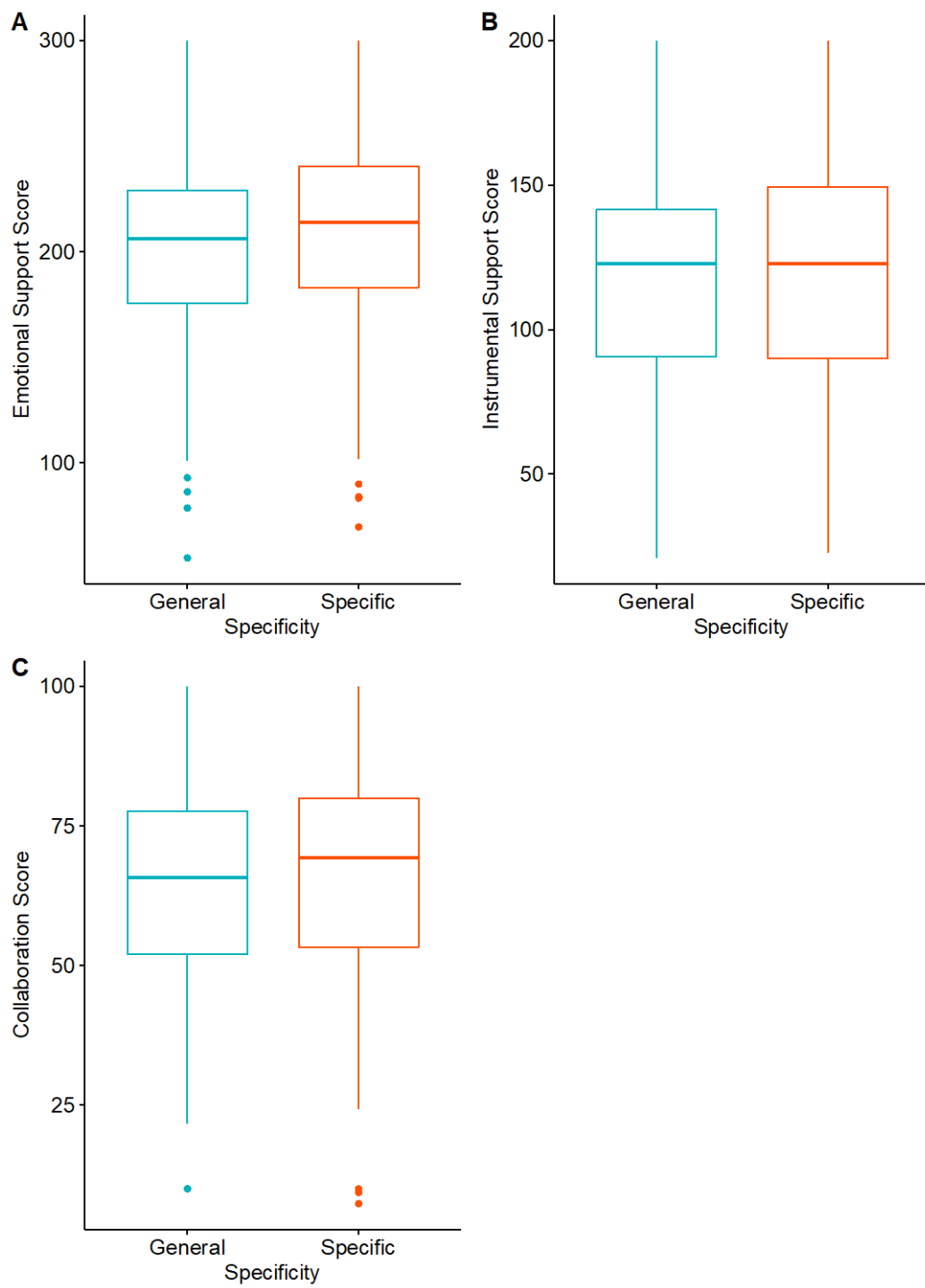
References

- Alea, N., & Bluck, S. (2003). Why are you telling me that? A conceptual model of the social function of autobiographical memory. *Memory*, *11*(2), 165–178. <https://doi.org/10.1080/741938207>
- Alea, N., & Bluck, S. (2007). I'll keep you in mind: The intimacy function of autobiographical memory. *Applied Cognitive Psychology*, *21*(8), 1091–1111. <https://doi.org/10.1002/acp.1316>
- Barry, T. J., Hallford, D. J., & Takano, K. (2021). Autobiographical Memory Impairments as a Transdiagnostic Feature of Mental Illness: A Meta-Analytic Review of Investigations Into Autobiographical Memory Specificity and Overgenerality Among People With Psychiatric Diagnoses. *Psychological Bulletin*, *147*(10), 1054–1074. <https://doi.org/10.1037/bul0000345>
- Barry, T. J., Lenaert, B., Hermans, D., Raes, F., & Griffith, J. W. (2018). Meta-Analysis of the Association Between Autobiographical Memory Specificity and Exposure to Trauma. *Journal of Traumatic Stress*, *31*(1), 35–46. <https://doi.org/10.1002/jts.22263>
- Barry, T. J., Sze, W. Y., & Raes, F. (2019). A meta-analysis and systematic review of Memory Specificity Training (MeST) in the treatment of emotional disorders. *Behaviour Research and Therapy*, *116*(November 2018), 36–51. <https://doi.org/10.1016/j.brat.2019.02.001>
- Barry, T. J., Vinograd, M., Boddez, Y., Raes, F., Zinbarg, R., Mineka, S., & Craske, M. G. (2019). Reduced autobiographical memory specificity affects general distress through poor social support. *Memory*, *27*(7), 916–923. <https://doi.org/10.1080/09658211.2019.1607876>
- Beike, D. R., Brandon, N. R., & Cole, H. E. (2016). Is sharing specific autobiographical memories a distinct form of self-disclosure? *Journal of Experimental Psychology: General*, *145*(4), 434–450. <https://doi.org/10.1037/xge0000143>
- Bradbury, T. N., Fincham, F. D., & Beach, S. R. H. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and Family*, *62*(4), 964–980. <https://doi.org/10.1111/j.1741-3737.2000.00964.x>
- Chiu, C. H. M., Ma, H. W., Boddez, Y., Raes, F., & Barry, T. J. (2019). Social support from friends predicts changes in memory specificity following a stressful life event. *Memory*, *27*(9), 1263–1272. <https://doi.org/10.1080/09658211.2019.1648687>
- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. *Psychological Bulletin*. <https://doi.org/10.1037/0033-2909.116.3.457>
- Dalgard, O. S., Dowrick, C., Lehtinen, V., Vazquez-Barquero, J. L., Casey, P., Wilkinson, G., Ayuso-Mateos, J. L., Page, H., & Dunn, G. (2006). Negative life events, social support and gender difference in depression. *Social Psychiatry and Psychiatric Epidemiology*, *41*(6), 444–451. <https://doi.org/10.1007/s00127-006-0051-5>
- Egbert, N. (2003). Support provider mood and familiar versus unfamiliar events: An investigation of social support quality. *Communication Quarterly*, *51*(2), 209–224. <https://doi.org/10.1080/01463370309370151>
- Goffin, S., Raes, F., Boddez, Y., & Barry, T. J. (2022). The sharing of autobiographical memories elicits social support. <https://doi.org/10.17605/OSF.IO/6FV4T>
- Guan, L., & Wang, Q. (2022). Does Sharing Memories Make Us Feel Closer? The Roles of Memory Type and Culture. *Journal of Cross-Cultural Psychology*. <https://doi.org/10.1177/00220221211072809>

- Hallford, D. J., Barry, T. J., Belmans, E., Raes, F., Dax, S., Nishiguchi, Y., & Takano, K. (2021). Specificity and detail in autobiographical memory retrieval: a multi-site (re)investigation. *Memory*, 29(1), 1–10. <https://doi.org/10.1080/09658211.2020.1838548>
- Knoll, N., Kienle, R., Bauer, K., Pfüller, B., & Luszczynska, A. (2007). Affect and enacted support in couples undergoing in-vitro fertilization: When providing is better than receiving. *Social Science and Medicine*. <https://doi.org/10.1016/j.socscimed.2007.01.004>
- Levine, B., Svoboda, E., Hay, J. F., Winocur, G., & Moscovitch, M. (2002). Aging and autobiographical memory: Dissociating episodic from semantic retrieval. *Psychology and Aging*, 17(4), 677–689. <https://doi.org/10.1037/0882-7974.17.4.677>
- Locey, M. L., Jones, B. A., & Rachlin, H. (2011). Real and hypothetical rewards in self-control and social discounting. *Judgment and Decision Making*, 6(6), 552–564.
- Martens, K., Barry, T. J., Takano, K., & Raes, F. (2019). The transportability of Memory Specificity Training (MeST): adapting an intervention derived from experimental psychology to routine clinical practices. *BMC Psychology*, 1–13.
- Mayr, U., & Freund, A. M. (2020). Do We Become More Prosocial as We Age, and if So, Why? *Current Directions in Psychological Science*. <https://doi.org/10.1177/0963721420910811>
- Ono, M., Devilly, G. J., & Shum, D. H. K. (2015). A meta-analytic review of overgeneral memory: The role of trauma history, mood, and the presence of posttraumatic stress disorder. *Psychological Trauma: Theory, Research, Practice, and Policy*, 8(2), 157–164. <https://doi.org/http://dx.doi.org/10.1037/tra0000027>
- Pasupathi, M., & Carstensen, L. L. (2003). Age and emotional experience during mutual reminiscing. *Psychology and Aging*, 18(3), 430–442. <https://doi.org/10.1037/0882-7974.18.3.430>
- Pillemer, D. B. (1992). Remembering personal circumstances: A functional analysis. In E. Winograd & U. Neisser (Eds.), *Affect and Accuracy in Recall* (pp. 236–264). Cambridge University Press. <https://doi.org/10.1017/CBO9780511664069.013>
- R Core Team. (2020). R: A Language and Environment for Statistical Computing. In *R Foundation for Statistical Computing: Vol. Vienna, Au*.
- Raes, F., Hermans, D., Williams, J. M. G., & Eelen, P. (2005). Autobiographical memory specificity and emotional abuse. *The British Journal of Clinical Psychology / the British Psychological Society*, 44(Pt 1), 133–138. <https://doi.org/10.1348/014466504X20080>
- Raes, F., Williams, J. M. G., & Hermans, D. (2009). Reducing cognitive vulnerability to depression: A preliminary investigation of MEMory Specificity Training (MEST) in inpatients with depressive symptomatology. *Journal of Behavior Therapy and Experimental Psychiatry*, 40(1), 24–38. <https://doi.org/10.1016/j.jbtep.2008.03.001>
- Ross, M., & Holmberg, D. (1992). Are Wives Memories for Events in Relationships more Vivid than their Husbands Memories? *Journal of Social and Personal Relationships*, 9(4), 585–604. <https://doi.org/10.1177/0265407592094007>
- Schank, R. C., & Abelson, R. (1995). Knowledge and memory: the real story. In R. S. Wyer (Ed.), *Advances in Social Cognition* (pp. 1–85). Lawrence Erlbaum Associates. <https://doi.org/10.5860/choice.33-3602>
- Shakespeare-Finch, J., & Obst, P. L. (2011). The development of the 2-way social support scale: A measure of giving and receiving emotional and instrumental support. *Journal of Personality Assessment*, 93(5), 483–490. <https://doi.org/10.1080/00223891.2011.594124>

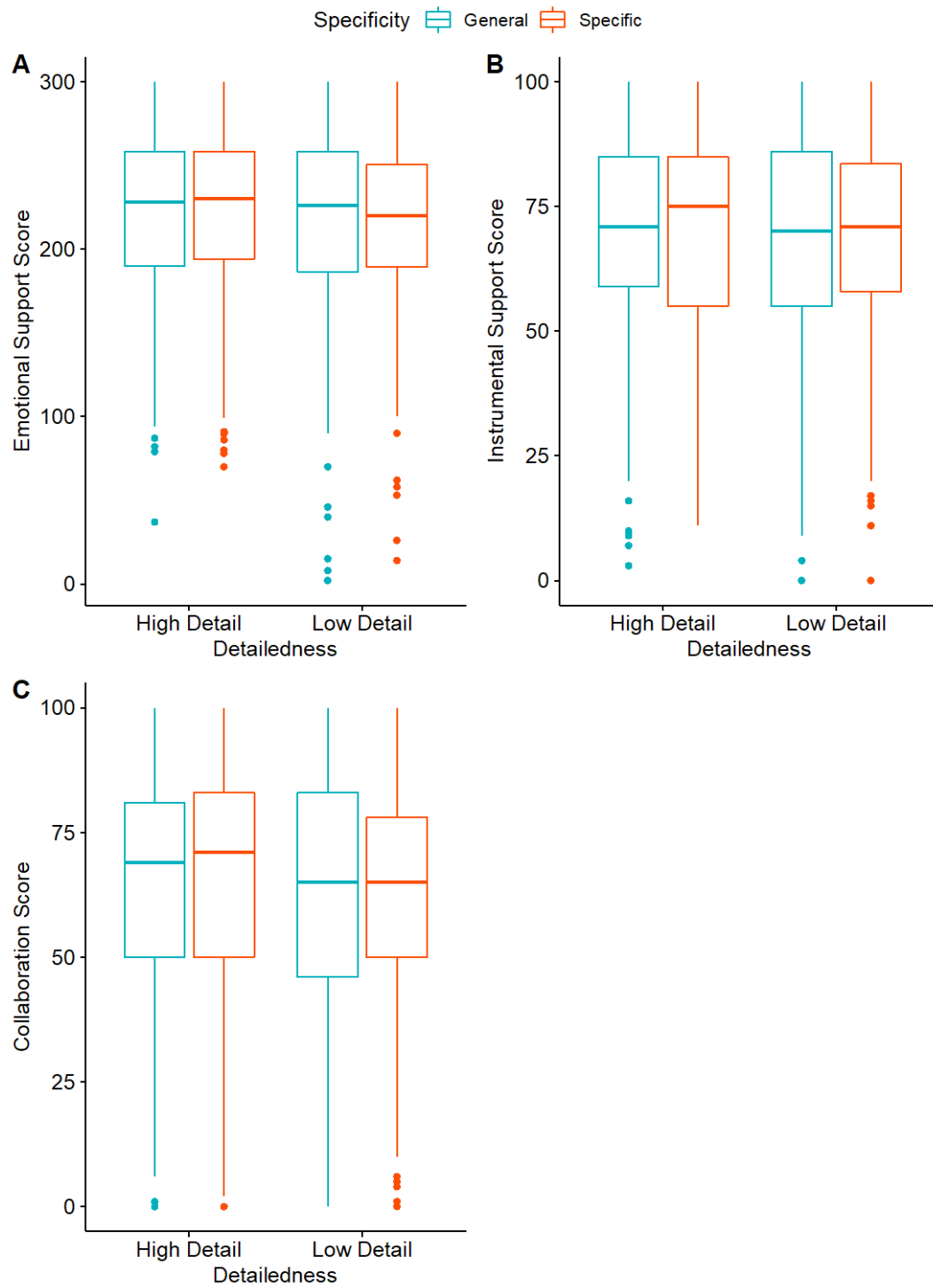
- Sias, P. M., & Bartoo, H. (2007). Friendship, social support, and health. In L. L'Abate (Ed.), *Low-cost approaches to promote physical and mental health: Theory, research, and practice* (pp. 455–472). Springer Science + Business Media. https://doi.org/10.1007/0-387-36899-X_23
- Singmann, H., Bolker, B., Westfall, J., Aust, F., & Ben-Shachar, M. S. (2020). *Package "afex". Analysis of factorial experiments.*
- Sprecher, S., Treger, S., Wondra, J. D., Hilaire, N., & Wallpe, K. (2013). Taking turns: Reciprocal self-disclosure promotes liking in initial interactions. *Journal of Experimental Social Psychology, 49*(5), 860–866. <https://doi.org/10.1016/j.jesp.2013.03.017>
- Tannen, D. (1990). *You Just Don't Understand: Men and women in conversation.* Ballantine Books.
- Vanaken, L., Bijttebier, P., & Hermans, D. (2020). I like you better when you are coherent. Narrating autobiographical memories in a coherent manner has a positive impact on listeners' social evaluations. *Plos One, 15*(4), e0232214. <https://doi.org/10.1371/journal.pone.0232214>
- Vlaev, I. (2012). How different are real and hypothetical decisions? Overestimation, contrast and assimilation in social interaction. *Journal of Economic Psychology, 33*(5), 963–972. <https://doi.org/10.1016/j.joep.2012.05.005>
- Webster, J. D. (1995). Adult age differences in reminiscence functions. In B. K. Haight & J. D. Webster (Eds.), *The art and science of reminiscing: Theory, research, methods, and applications.* Taylor & Francis.
- Williams, J. M. G., Barnhofer, T., Crane, C., Hermans, D., Raes, F., Watkins, E., & Dalgleish, T. (2007). Autobiographical memory specificity and emotional disorder. *Psychological Bulletin, 133*(1), 122–148. <https://doi.org/10.1037/0033-2909.133.1.122>
- Williams, J. M. G., & Broadbent, K. (1986). Autobiographical memory in suicide attempters. *Journal of Abnormal Psychology, 95*, 144–149. <https://doi.org/10.1037/0021-843X.95.2.144>

Figure 1. Study 1 box plot



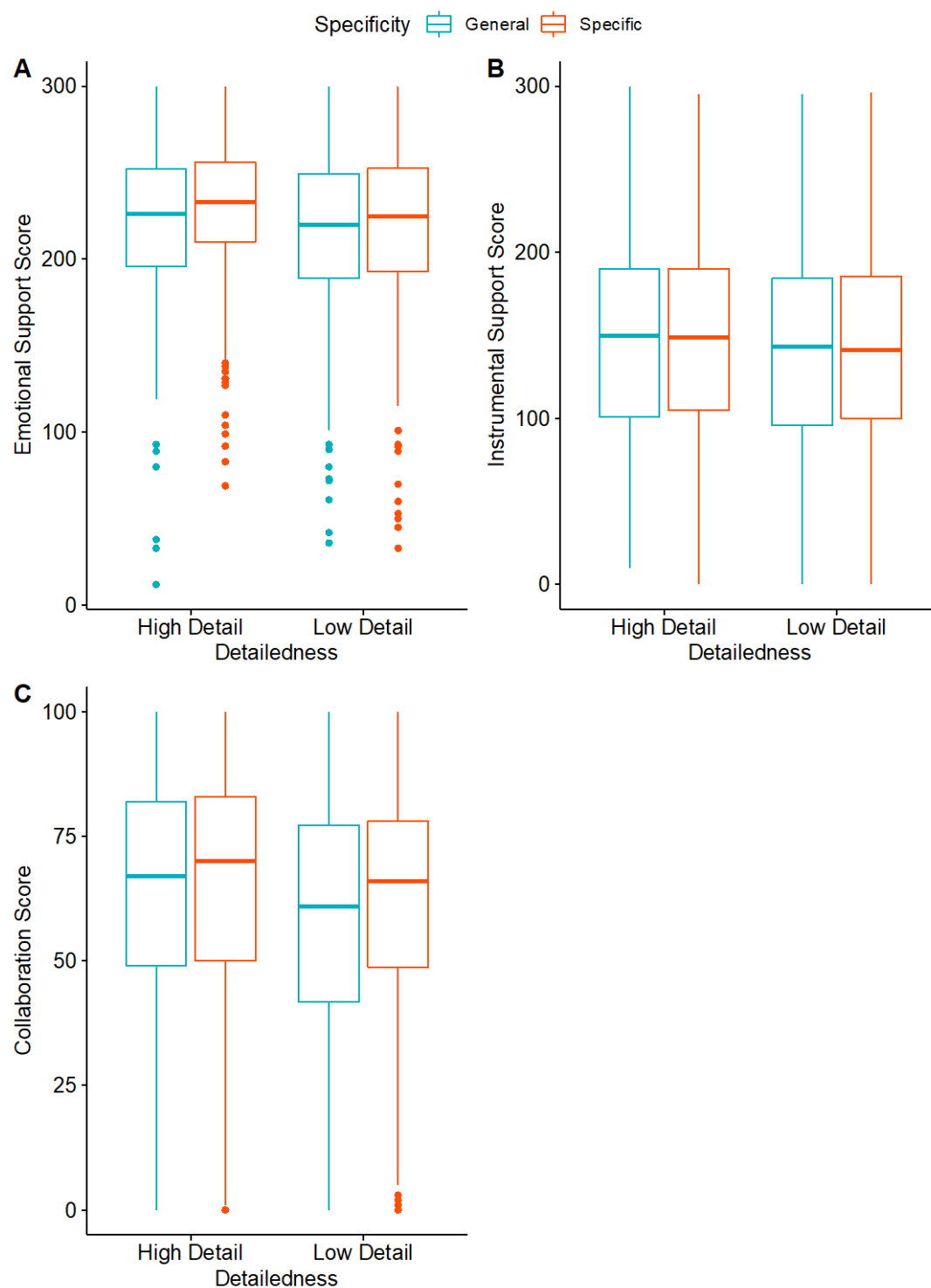
Note. Box plot depicting mean scores for Emotional Support (A), Instrumental Support (B) and Collaboration (C) in Study 1 for profiles that shared specific and general memories.

Figure 2. Study 2 box plot



Note. Box plot depicting scores for Emotional Support (A), Instrumental Support (B) Collaboration (C) in Study 2 for profiles that shared high detailed, specific and general memories, and low detailed, specific and general memories.

Figure 3. Study 3 box plot



Note. Box plot depicting scores for Emotional Support (A), Instrumental Support (B) Collaboration (C) in Study 3 for profiles that shared reported high detailed, specific and general memories, and low detailed, specific and general memories.