
“Did You Just Purchase a Butt Head on Amazon?” – A Diary Study of Couples’ Everyday Account Sharing

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ABSTRACT

Many couples report sharing digital accounts for convenience even though this puts their privacy and security at risk. In order to design for couples’ secured information sharing needs, we need to look at their day-to-day account sharing behaviors in context. We conducted a 30-day diary study of daily account sharing behaviors with 14 participants currently in a romantic relationship. We analyzed 382 diary entries and 529 sharing stories to understand couples’ everyday sharing behaviors. Our study also coincided with the COVID-19 pandemic, allowing us to discover new sharing behaviors and account uses in quarantine.

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CSCW '20 Companion, October 17–21, 2020, Virtual Event, USA

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ACM ISBN 978-1-4503-8059-1/20/10.

<https://doi.org/10.1145/3406865.3418340>

KEYWORDS

Account sharing; Romantic Relationships; Diary study; Collaborations; Cybersecurity

Romantic Cybersecurity Daily Diary Form

Part I: Relationship evaluation

Thinking about your relationship with your partner, score your evaluation of the following statements on a scale from 0 to 8 where 0 = do not agree at all and 8 means agree completely:

- I feel satisfied with our relationship at the moment
- I intend to stay in this relationship

Part II: Shared accounts used today

For the shared account (s) that has been accessed today:

- Why did you access the account?
- Which tasks did you complete? What worked well and what didn't?
- Did you have any conversations with your partner about the account today?

In general:

- Have you updated password for any of the shared accounts?

Part III: Start or stop sharing

Tell us if you started or stopped sharing any accounts with your partner and why.

Figure 1: A sample of the diary study form that participants filled out every day for 30 days to document their sharing behaviors

INTRODUCTION

People today own an average of 80 accounts [3], requiring lots of effort to manage. Sharing accounts is one way to reduce the effort and cost of having multiple accounts. In intimate relationships such as between family members and romantic couples, studies [5, 6, 8] have found people have a variety of motivations for sharing accounts.

We define *account sharing in a romantic relationship* as any situation in which two people in the relationship use a single digital account, either at the same time or taking turns. Although previous studies of account sharing in close relationships describe motivations for sharing and common sharing strategies, we lack an understanding of the everyday uses of shared accounts. In addition, romantic couples as a special social group have unique characteristics like relationship satisfaction levels or living arrangements that might affect day-to-day sharing behaviors. An understanding of a couple's every day sharing practices will help service providers better support their sharing behaviors with a holistic view of daily uses and most frequently used shared accounts.

We conducted a 30-day diary study with 14 participants engaged in a romantic relationship for at least 6 months and sharing more than one account with their partners. Over the two month period of the study, participants completed 382 diary entries. We collected a total of 529 sharing stories. A *sharing story* is defined as any time participants described sharing behaviors associated with a certain account in one diary entry. These sharing stories comprised our primary unit of analysis. The major contributions of our work are an understanding of: 1) the benefits and challenges in everyday account sharing, and 2) the impact of the COVID-19 on couples' account sharing and everyday account uses.

METHOD

To capture couples' sharing behaviors in situ, we chose a diary study approach because it allowed us to understand couples' sharing behaviors in context, versus surveys and interviews, which rely on participants' recall. The diary study included three parts - an introductory interview conducted before the start of the study, a daily diary participants filled out for 30 days (*Figure 1*) and an exit interview conducted after the last diary entry. The daily diary asked participants to report on account sharing behaviors and relationship satisfaction on two items from a validated scale [7].

Participants included 8 women and 6 men; across the age spectrum (5 were 18 - 24, 6 were 25 - 34, 3 were 35 - 44); They were located across the U.S. in both small-size cities (around 100,000 people) and megacities (over 1 million people). Nine of our participants cohabitated in the same residence, while five lived in different residences less than 25 miles apart. Relationship lengths varied from 6 months to more than 10 years. Participants were sharing a wide range of accounts including entertainment, shopping, finance and investment, emails, and so on. Each participant was compensated \$50 for the study.

BENEFITS AND CHALLENGES IN ROMANTIC SHARING

On average, our participants accessed one of their shared accounts at least once every two days.

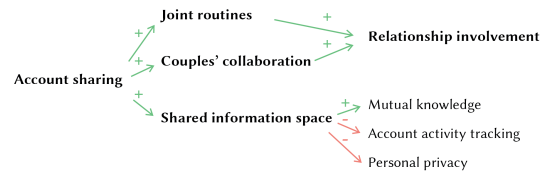


Figure 2: Summary of romantic couples' every day sharing outcomes, which highlight the benefits and challenges of sharing

As one of our participants described “*despite all the nuances, the convenience still outweighs (the challenges)*” (P1). We identified three benefits and two challenges in romantic sharing (Figure 2).

Sharing accounts facilitates a healthy relationship.

Sharing enables joint routines. We found many couples spent time together consuming entertainment content through their shared accounts on a regular basis. Examples included binge-watching on Netflix, playing console games together, and so on. P2 documented 17 times when he accessed Netflix to watch shows with his partner. It became a routine for them to watch shows and movies together every night. P2 constantly documented moments such as “*We enjoyed laughing at the TV shows.*”, and “*we discussed what to watch.*” Sharing these routines might result in higher relationship satisfaction.

Sharing supports the couple's collaboration. We found sharing accounts enables couples to collaboratively divide tasks to achieve life efficiency. They split tasks up depending on each other's availability or what each of them specialized in, in terms of skills or knowledge. We observed several cases where when one partner was busier, their partner would use their account to take care of tasks that were time-consuming, frequent, and repetitive such as managing and responding to emails. People also voluntarily took on roles within the relationship based on expertise. For example, P1 was good at time and task management, so he reminded his partner about tasks that needed to be done in their shared account such as to renew the Amazon subscription. The collaborative labor division helped couples reduce the mental stress of managing multiple tasks in the accounts.

Sharing creates a shared information space. We found account sharing enabled couples to see each other's activities. This activity awareness increased partners' knowledge about each other. In addition, this awareness supported discussions about account activities. For example, P4 introduced her partner to a show on their shared Netflix. P4 documented many cases when she and her partner had follow-up discussions about the show, which “*makes us feel more engaged as a couple.*” (P4). Previous research has found increased interactions and relationship involvement results in higher relationship quality [1]. Our results also suggested that as couples have more interactions with each other related to their shared accounts, their relationships may be enhanced on a daily basis.

Confusions and privacy concerns in romantic sharing.

The shared information space within a shared account sometimes caused confusion among partners. P5 once purchased a weird item on Amazon without telling her partner, whose email was linked to Amazon. Her partner got confused when he received the order confirmation: “*He was like ‘Umm... did you really just purchase a butt head?’ because it probably seemed like maybe a hack?*” (P5). Such unidentifiable account use could cause stress and obfuscate real security threats. Sharing accounts, therefore, carries risks and vulnerability as it's harder for couples to maintain an accurate understanding of account activities.

We found account sharing led to some unwanted information sharing. P1 found Amazon and

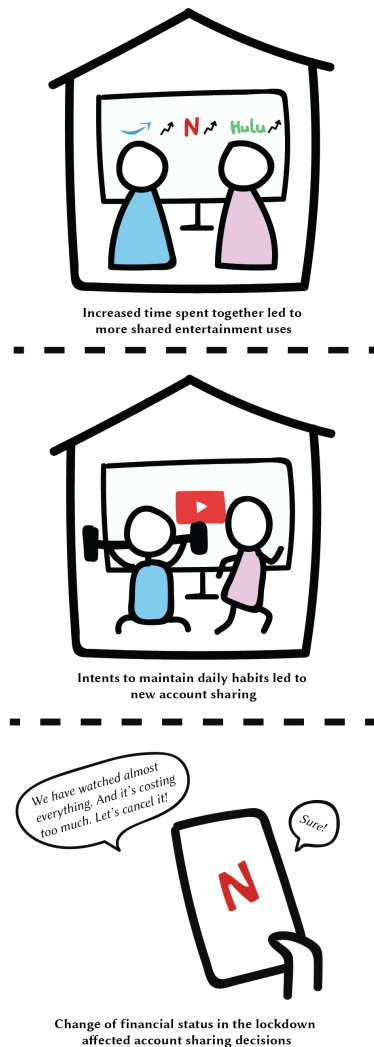


Figure 3: New account uses and sharing behaviors occur in quarantine

PayPal sharing gave him too much information about the amount of money his partner spent on certain products, which led to arguments and lowered his relationship satisfaction. Previous studies [2, 4] on boundaries in romantic relationships identified respecting one's privacy as a crucial way to maintain healthy relationships.

ACCOUNT SHARING IN QUARANTINE

The COVID-19 pandemic coincided with our study, allowing us to observe everyday account uses and account sharing in quarantine (Figure 3). We found most couples increased the uses of their shared accounts, especially entertainment and gaming accounts that they enjoyed together in the leisure time. We also found new account sharing behaviors occurred in quarantine as people spent more time indoors. P6 started to use her partner's YouTube account to continue her regular yoga routines as she could not go to her yoga studio.

For cohabitating couples, staying in the same place for an increased amount of time made it easier for them to share accounts, and provided more opportunities for mutual information sharing when using the shared accounts together. For example, P8 moved in with her partner when the stay-at-home order started, which made it easier for them to share a Spotify account. They then developed a shared routine of playing the shared Spotify during their dinner preparations. As a result of sharing the account they developed a better understanding of each other's music tastes, which enhanced the couple's relationship.

We also found the economic crisis caused by COVID-19 affected participants' financial statuses. As a result, some of our participants decided to cancel shared accounts with subscription fees to reduce financial burdens. P10 had to get rid of Netflix when their main source of income was dramatically reduced by the stay-at-home order: "With the economic and health crisis we are experiencing, I can't afford any extra luxuries like Netflix, so it will have to go." (P10)

CONCLUSION AND FUTURE WORK

We present initial results from a diary study on romantic couples' account sharing behaviors. We discussed the benefits and challenges in everyday account sharing among the romantic couples, and COVID-19's impact on account uses. The line between intimacy and privacy was blurry for our couples raising the question - how much of one's personal life should be known and to what extent should it be shared with someone? The more accounts partners share, the more vulnerable their information. Although close couples were supporting each other in relationships through their shared accounts as noted above, there were still areas people found uncomfortable to share. In future work, we plan to extend our analysis and use these findings to inform the design of technology to better support account sharing in close relationships.

ACKNOWLEDGEMENTS

We thank our participants who shared their experiences with us. This material is based upon work supported by the U.S. National Science Foundation under Award No. CNS-1704087.

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